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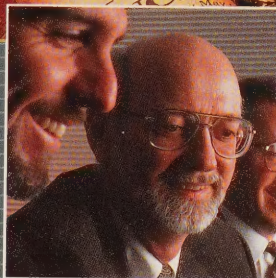
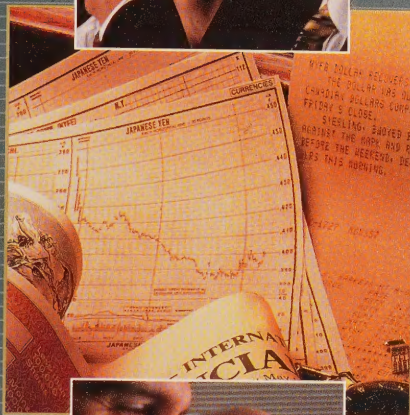
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# ANNUAL REPORT

1996





# CORPORATE PROFILE

The Ontario Teachers' Pension Plan Board is responsible for the retirement income of approximately 155,000 elementary and secondary school teachers, 53,000 retired teachers and their survivors, and 90,000 former teachers with entitlements in the plan. It is sponsored by a partnership between the Ontario government and the plan members, who are represented by the Ontario Teachers' Federation.

At the end of 1996, actuarially adjusted net assets were greater than the cost of future pensions, resulting in a \$1.2 billion surplus. This was the first surplus since the board adopted a diversified investment strategy in 1990, when the plan had a \$3.6 billion deficiency.

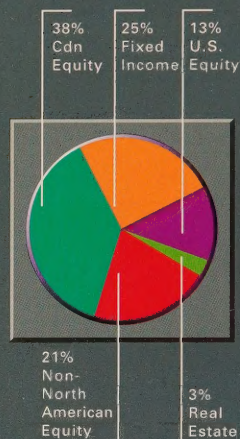
Approximately three-quarters of the plan's \$50.9 billion assets are equities, principally shares in public companies and equity-return derivative contracts. The equity portfolio also includes income-producing real estate properties and shares in private companies. The remaining assets are fixed-income securities, largely government bonds.

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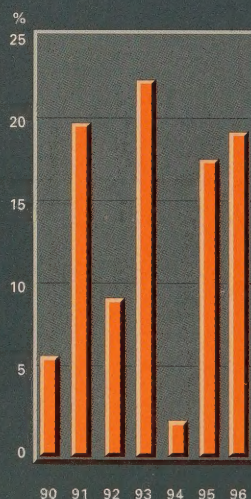
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### ASSET MIX

as at December 31, 1996



### RATE OF RETURN HISTORY (percentage)



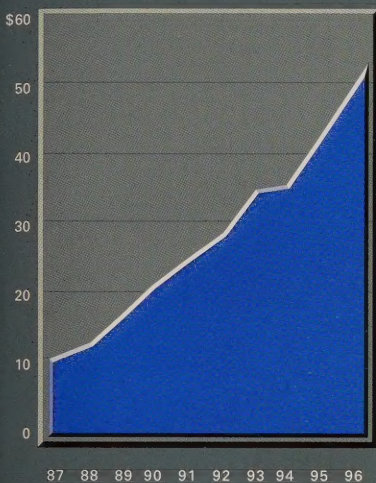


# FINANCIAL HIGHLIGHTS

AS AT DECEMBER 31

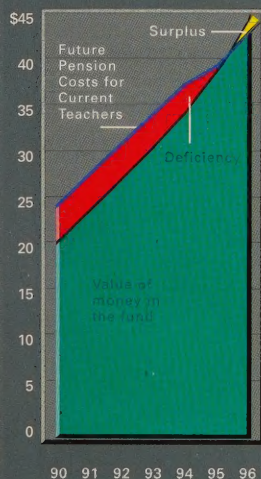
## TOTAL ASSETS

as at December 31  
(\$ billions)



## SURPLUS

as at December 31  
(\$ billions)



## INVESTMENT PERFORMANCE

Investment performance (%)	1996	1995
<b>Rate of return on investments</b>		
Annual	19.0%	16.9%
Composite benchmark	18.1	17.2
Real return, after inflation	16.8	15.2
Four-year average	14.6	12.1
Four-year benchmark	13.5	11.0
Four-year real return	13.1	10.6

## Average annual compound rates of return (%)

	1 yr	2 yr	3 yr	4 yr	5 yr	6 yr	7 yr
Our return	19.0	18.0	12.3	14.6	13.4	14.4	13.1
Benchmark	18.1	17.6	11.3	13.5	12.4	12.9	9.7

## TOTAL ASSETS

(\$ Billions)	1996	1995
Investments, cash and other	\$49.6	\$40.6
Contributions receivable	1.3	1.3
<b>Total assets</b>	<b>\$50.9</b>	<b>\$41.9</b>

## SURPLUS STATUS

(\$ Billions)	1996	1995
Total assets	\$50.9	\$41.9
Accounts payable and accruals	3.5	1.8
Net assets	47.4	40.1
Smoothing of gains*	4.4	1.9
Actuarially adjusted net assets	43.0	38.2
Cost of future pensions	41.8	38.7
<b>Surplus</b>	<b>\$ 1.2</b>	<b>\$ (0.5)</b>

\*We smooth gains and losses over five years to reduce the impact of market volatility on plan surplus.

## CHAIR'S REPORT

Pension funds and mutual funds manage investments on behalf of millions of working Canadians looking for future financial security. In the process, they have become substantial investors in Canadian corporations. In 1975, for example, pension and mutual funds had \$5.3 billion invested in Canadian equities. Today, that figure is almost \$180 billion. This growth reflects two powerful developments. One is the explosion in the number of mutual funds from just 63 in 1975 to nearly 1,000 funds today. The other is the shift of pension fund assets from fixed income securities into stocks. Pension and mutual funds own nearly one-third of the shares in Canada's publicly traded corporations — a dramatic change from two decades ago when institutional holdings were less than one percent.

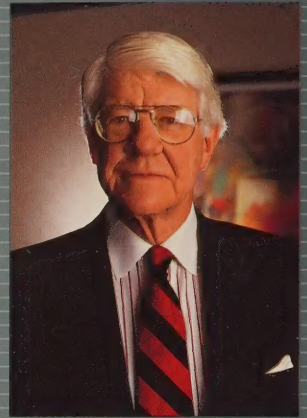
For our part, the Teachers' pension plan has \$17 billion invested in Canadian stocks, compared with nothing in 1990. However, despite our size, our investments represent only 9 percent of total pension and mutual fund holdings in Canadian equities. In terms of the 300 largest companies listed on the Toronto Stock Exchange, our ownership is about three percent. Consequently, we are only one voice among many institutional investors.

The visibility of large pension funds in public markets raises questions about their accountability. Who is in charge of this capital wealth? How do we exercise economic influence? To whom are we answerable? The directors of the Teachers' pension plan take these questions seriously.

As an investor, we are driven by the need to acquire assets that will meet the \$42 billion in present and future pensions promised to approximately 300,000 plan members. Consequently, one responsibility is to maximize investment returns so that members are confident of receiving their pensions. The other primary responsibility is to administer the pension plan to the highest professional standards, including the delivery of effective customer service and accurate pension payments.

The composition of our board of directors reflects the importance of including individuals with first-hand experience in these two areas. Over the past seven years, the plan's partners, the Ontario government and the Ontario Teachers' Federation, have nominated individuals with investment expertise as well as knowledge of employee benefits and the teaching profession. As a result, the board functions well in fulfilling its governance obligations and challenging management to high levels of performance.

With the exception of the chair, directors are appointed for a maximum of four two-year terms. The retirement dates of the founding directors were staggered to ensure continuity of board experience. At the beginning of 1997,



C. Edward Medland  
Chair

**In terms of the  
300 largest  
companies listed,  
our ownership  
is about three  
percent.**



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**The directors are accountable  
to the plan beneficiaries to  
earn the best returns available.**

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only two original directors (Gail Cook-Bennett and myself) remained. The two most recent appointees are Lucy Greene, vice-president of corporate human resources at Sun Life Assurance Company of Canada, and Ann Finlayson, a journalist and university teacher who authored a book on the Canadian pension industry. They follow the appointment in 1996 of Geoffrey Clarkson, a retired senior partner with Ernst & Young, and Robert Korthals, former president of the Toronto-Dominion Bank.

The directors are accountable to the plan beneficiaries and are required to ensure investment policies that can earn the best returns available by way of income and capital appreciation without taking imprudent risks.

In practice, day-to-day decisions are made by internal staff accountable to the directors. We also employ external fund managers, who look after about 10 percent of the plan's assets, mainly foreign investments. All directors are on the board's investment committee, which meets regularly with management. We approve the fund's long-term investment goals, review and approve annual objectives and policies proposed by staff and approve long-term performance targets for each portfolio and for each investment manager. We also discuss the matching of assets and liabilities, assess the risks involved and review major investment proposals.

Our sensitivity to issues of accountability is evident in other ways. One is this annual report in which we comply with the disclosure standards set by securities regulators and stock exchanges for publicly traded companies. Because the fund is an important investor in public markets, we have authorized management to comment publicly on any issue that relates to the pension plan and its investments. This typically involves significant new investments, situations in which the plan owns more than 10 percent of the shares of a corporation for which timely disclosure is required by law, the fund's financial performance, corporate governance issues, and the relationship of the pension board to corporations in which it invests.

Ownership rights are exerted by voting on management proxy proposals. In 1996 the pension board exercised proxies in 325 Canadian companies. Within these proxies, we voted against several proposals which were not, in our view, in the best interests of shareholders. One concern was stock option proposals that appeared excessively generous to management and would unreasonably dilute shareholder wealth. Another concern was shareholder rights plans that would allow a company to issue a large number of new shares to ward off an unsolicited takeover offer. We believe this is not in the best interests of shareholders seeking optimum value for their investments.



## CHAIR'S REPORT

The pension board is not interested in, nor is it staffed for, managing companies in which it invests. We have often stated that corporations should concentrate on creating shareholder wealth. This has led some people to conclude that we are concerned solely about profits to the exclusion of other socio-economic benefits.

In 1996, some news media suggested that pension funds encourage companies to lay off workers to make short-term profits. Our investment horizon spans decades and attempts to match long-term assets with long-term liabilities. We do not support layoffs to make short-term profits, although restructuring is sometimes essential to a company's survival and long-term financial viability.

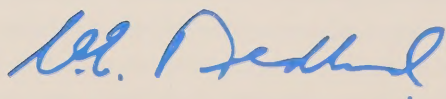
In our experience, companies that create sustainable value pay attention to management/labor relations, direct and indirect employment growth, the quality and diversity of the management team, investment in research and development, product quality and innovation, customer service, environmental performance, and community affairs. Clearly value growth involves much more than rates of return, though they remain the ultimate measure of investment performance.

All in all, the board of directors is very pleased with the results being achieved by the pension plan's management viewed from the perspective of long-term investment returns, improved member services, the exercise of fiduciary duties, and the commitment to public accountability.

As a large proportion of the "baby boom" generation of teachers enters retirement at the beginning of the next century, rising pension liabilities will increase the pressure on investment results and member services. The role of the directors is to ensure that these demands are met to the highest standards of professionalism and in accordance with fiduciary obligations.

### ACKNOWLEDGMENTS

I would like to thank retiring directors Doug McAndless and Lynne Sullivan for their unselfish service during the past seven years. I also would like to thank the continuing directors for their vigorous participation and commitment during my first year as chair.



C. EDWARD MEDLAND

CHAIR

**Our investment horizon spans decades and attempts to match long-term assets with long-term liabilities.**

**NUMBER OF PENSIONERS**  
as at December 31  
(thousands)







## BOARD OF DIRECTORS

*From left to right:*

**C. Edward Medland**

Former Chief Executive Officer of Wood Gundy Inc. *Chair of the Board*

**Lucy G. Greene**

Vice-President of Human Resources with Sun Life Assurance Company of Canada

**Ann Finlayson**

Journalist, speaker, freelance editor and consultant, she has written three books including, *Whose Money is it Anyway? The Showdown on Pensions* (1988)

**Robert W. Korthals**

Former President of the Toronto-Dominion Bank. *Chair of the Investment Committee*

**Jalynn H. Bennett**

President of Jalynn H. Bennett & Associates Ltd., a consulting firm specializing in strategic planning and organizational development. *Chair of the Audit and Actuarial Committee*

**Gail Cook Bennett**

Executive Vice-President of the University of Toronto, former Chair of the University of Toronto's Board of Trustees with the C.I.B. Foundation

**Geoffrey W. Jackson**

Chartered accountant and former partner with Ernst & Young

**David J. Lemus**

Secretary of the Ontario Teachers' Federation, former principal. *Chair of the Equity and Adjudication Committee*

**Martin R. Hicks**

Investment consultant with extensive experience in the Canadian investment industry. Former executive at PIMCO

**We do not support  
layoffs to make  
short-term profits.**

## P R E S I D E N T ' S   R E P O R T

We face two major challenges in managing the pension plan. One is to match appropriate assets with the plan's liabilities to deliver the retirement income promised to plan members. The other is to deliver benefits and services in a professional and cost-effective manner. Good progress was made on both fronts in 1996.

### THE PRESSURE OF RISING LIABILITIES

At the end of 1996, the pension plan had liabilities of \$42 billion, almost double the \$22 billion when the pension board was created in 1990. During that time, our pensioner population has grown from less than 40,000 to over 53,000. In 1996 alone, more than 5,000 teachers started their pensions, a 20 percent increase over a year earlier. Based on current plan membership and management's assumptions about long-term economic factors, liabilities grew by \$3.1 billion in 1996.

The growth in pensioners and payments will accelerate. Half of the plan's 155,000 active teachers are expected to retire over the next 15 years. By 2011, the pensioner population will exceed 100,000. Teachers are currently retiring on average at age 58 and are expected to live on pension for 25 years. In 1996, the pension payroll could be as much as \$5 billion annually, compared with \$1.4 billion in 1996.

These demographics underscore the importance of implementing a diversified investment policy that focuses on maximizing long-term investment returns so that we can pay the pensions promised without increasing contributions. The growth in pensioner population relative to the size of the teaching population means that we will depend more on investment returns to pay pensions in the future than is the case today. We estimate that 80 to 90 percent of retirement income will be met by investment income, rather than by contributions.

### CREATING A SURPLUS

Central to this long-term investment policy is the proper matching of assets and liabilities. When we started to diversify investments in 1990, the market value of assets in the plan fell short of liabilities by \$3.6 billion.

Our goal is to create a surplus of assets over liabilities as a safety cushion against volatile capital markets. Stock markets have performed extremely well over the past seven years. However, a major correction, which normally occurs every five years, could temporarily reduce asset values by several billions of dollars, while liabilities would continue to rise — hence the need for a cushion.



Claude Lamoureux  
President and  
Chief Executive Officer

**By 2011,  
the pensioner  
population  
will exceed  
100,000.**



## Stock markets have performed extremely well over the past seven years.

We are pleased to report that the plan achieved its first surplus in 1996 — \$1.2 billion, compared with the \$514 million deficit at the end of 1995.

### SHIFT IN ASSET MIX

Between 1990 and 1995, we shifted the plan's assets from solely Ontario debentures to approximately two-thirds equities and one-third fixed income securities. Equities include Canadian and foreign stocks in public and private companies, derivative contracts, and income-producing real estate. Fixed-income securities are largely federal and Ontario government bonds, derivative contracts, and smaller portfolios of foreign and corporate bonds.

In 1996, the board of directors approved an asset mix of 75 percent equities, although the exact proportion can fluctuate around this target level in response to market conditions. This asset mix should better match investment assets and returns with the plan's long-term pension liabilities.

### INVESTMENT PERFORMANCE

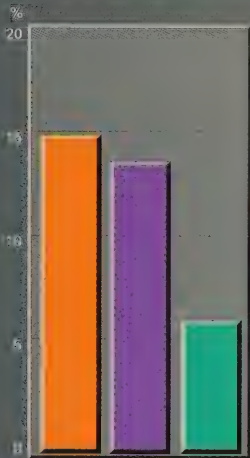
The shift in asset mix to equities, and the strong performance of Canadian and foreign stock markets, helped to produce a 19.0 percent rate of return in 1996, or \$7.4 billion, compared with 16.9 percent, or \$5.7 billion, in 1995. The 1996 performance was supported by value growth in the large Ontario debenture portfolio in response to lower interest rates. Our policy of actively managing as many assets as possible underpinned overall performance. By the end of 1996, 45 percent of assets were being actively managed.

On a four-year basis, which gives a better indication of performance reliability, we earned a 14.6 percent average rate of return. After allowing for inflation, the real rate of return was 13.1 percent, compared with the plan's long-term target of 4.5 percent above inflation. Achieving the long-term target is very important to avoiding an increase in current contribution rates to cover future pensions.

The four-year results compare favourably with the performance of the markets in which we invest. A composite benchmark, based on our asset mix, produced a 13.5 percent rate of return for the four years ended in 1996. Our ability to outperform market averages means that our investment effort has produced value added in excess of our benchmark of \$1.4 billion over the past four years.

For full details on our investment policies and performance, please see the section entitled Management's Discussion and Analysis.

#### 4-YEAR PERFORMANCE COMPARISON as at December 31, 1996



Teachers Pension 14.6%  
Benchmark 13.5%  
CPI + 4.5% = 6.0%

#### 1996 PERFORMANCE COMPARISON (percentage)



Teachers Pension 19%  
Benchmark 18.1%  
CPI + 4.5% = 6.7%

## P R E S I D E N T ' S   R E P O R T

### GROWTH IN SERVICES TO CUSTOMERS

We provide a centralized service to plan members. This spares school boards and participating independent schools from the costs of administering their own pension services.

The demand for customer services has risen steadily in recent years in step with the growing number of teachers approaching and entering retirement. In 1996, however, our work volume escalated mainly for three reasons.

First, many younger teachers were concerned about their financial affairs in the face of possible layoffs. Second, members reacted to rumours earlier in the year concerning the possible introduction of an 85 factor. The preparation of pension and termination estimates exceeded 10,000, a 50 per cent increase from the previous year.

Third, the number of teachers starting their pensions in 1996 grew by more than 20 percent to 5,008. We expect this level of retirements to continue for several years. In addition, we processed more than 600 disability and survivor pensions in 1996.

The increased workload lengthened the average time it takes to process a member request from 12 to 15 days. We remain committed, however, to the target of handling customer requests within 10 working days.

We conduct surveys of teachers and pensioners to gather feedback on pension administration services. The accompanying chart statistically tracks member satisfaction in the form of a quality service index. The level of satisfaction continued to rise in 1996 in spite of greater work volumes.

### PENSION REVIEW PROGRAM

The largest administrative challenge that we have undertaken is the verification of 50,000 pensions in pay. The project was launched in 1992 when we discovered that past errors in calculating entitlements were widespread.

The pension entitlement review program involves scrutinizing five million documents on paper, microfiche and computer tape going back more than 20 years. More than two million pieces of data needed to be verified.

When completed, we estimate that 50 percent of pension payments will remain unchanged and 50 percent, or approximately 25,000 pensions, will increase. The first 12,000 pension verifications were completed in December 1995 and the second round of 32,500 verifications in December 1996. The remaining 5,500 pensions will be verified in 1997.

### QUALITY SERVICE INDEX

*as at December 31*



Jan  
93 94 95 96

The yearly average of  
customer satisfaction on a  
scale of 1 to 5



## **The partners have agreed to use the gain to improve pension benefits.**

The one-time cost to the plan to pay amounts due to pensioners from the past is now estimated at \$180 million. The present value of continuing to pay promised pensions and future increased pension payments, spread over the lifetime of pensioners and their survivors (approximately 40 years), is about \$110 million. It should be noted that most of the original errors in calculating entitlements were not large. However, when inflation is factored in and interest is added, payouts can increase substantially, depending on the length of time the pension has been in pay.

### **IMPACT OF RECENT FUNDING VALUATION**

Every three years, the plan's independent actuary is required by law to make a funding valuation to determine whether an actuarial gain or loss exists. The most recent valuation, dated January 1, 1996, has been finalized and estimated a gain of \$712 million.

The partners have agreed to use the gain to improve pension benefits. For example, it will be easier for teachers to retire earlier on reduced pensions or to take a leave-of-absence within 5 years of retirement without losing pension credits. Occasional teachers will have a better opportunity of earning qualifying years of service. Pensions will be increased through change in the integration formula with the Canada Pension Plan.

We expect that benefits improvements will increase our workloads in 1997 by encouraging many teachers to request pension estimates and to opt for early retirement under the amended plan.

### **FUTURE ADMINISTRATION ISSUES**

As we finish the pension entitlement review program, other service improvements are being initiated. One is a review of the pension records of approximately 90,000 people who left the teaching profession to pursue other careers and still have entitlements in the plan.

Another major initiative is to extend the use of more frequent reporting by school boards and independent schools on contribution and service information for active teachers. This will ensure that we have more accurate and up-to-date information available when a member calls about pension entitlements.

A third project, initiated in 1996, is the calculation of entitlements based on the actual number of days that each teacher works in a year, rather than an assumed teaching year of 10 months, each with 20 days, which was used historically.

## P R E S I D E N T ' S   R E P O R T

### CHANGES IN OPERATING COSTS

The pension fund's operating costs rose by nearly 22 percent to \$69.2 million in 1996, compared with \$56.9 million a year earlier.

Costs relating to ongoing customer services were slightly higher for 1996 at \$16 million, compared with \$20.0 million in 1995, despite higher business volumes. The cost of the pension review program was \$8.7 million in 1996, compared with \$6.6 million in 1995.

Costs associated with investments increased to \$39.9 million, compared with \$10.3 million in 1995. The principal reason for the increase was the introduction of new information technology to better manage risk, expand our ability to analyze and develop quantitative investment portfolios, and handle higher transaction volumes. Internal staff costs for such specialists as investment managers, analysts, computer programmers and investment accountants represent 30 percent of total investment expenditures.

In 1996 investment costs were about 8.6 cents for each \$100 of assets, compared with 7.8 cents in 1995. The higher costs reflected the increased volume of assets under active management. These costs are reasonable compared with similar investment organizations. For example, the 1995 average cost of investment services among comparable North American pension funds was 8.5 cents per \$100 of assets and about \$2.00 for balanced mutual funds that invest in stocks and bonds.

An independent study on our ability to create value relative to investment costs is provided by Cost Effectiveness Measurement Inc. The most recent report for the three years ended in 1995, compared our performance with 100 Canadian and U.S. pension funds with assets averaging \$40.3 billion. The analysis concluded that our investment costs were lower than funds in the peer group and added value above the policy objectives set by the board of directors.

We will, of course, continue to tightly manage all operating costs to ensure that improvements in long-term investment returns and pension service offset their associated incremental costs. All employees are committed to their extra added value to plan members and I thank each one of them for their contribution.

ROBERT LAMOUREUX

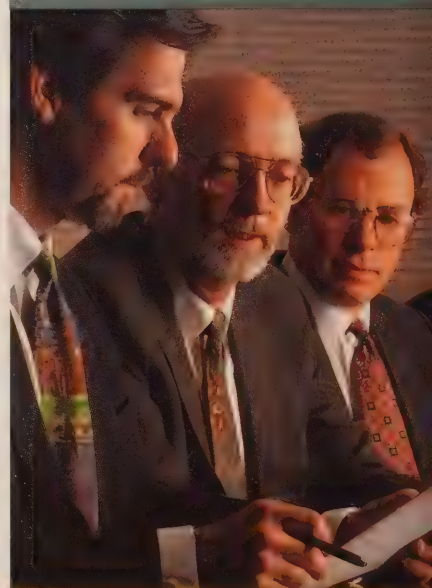
PRESIDENT AND CHIEF EXECUTIVE OFFICER

### CUSTOMER SERVICE EXPENSES

(\$ Millions)	1996	1995
Salaries and benefits	\$12.4	\$11.7
Special projects	8.7	6.6
Premises and equipment	3.9	5.9
Professional consulting services	2.1	2.4
Communication and travel	1.5	1.4
Board and committee remuneration	0.2	0.1
All other	0.5	0.5
	\$29.3	\$26.6

### INVESTMENT EXPENSES

(\$ Millions)	1996	1995
Salaries and benefits	\$15.6	\$11.1
Investment management fees	8.2	7.8
Custodial and banking fees	4.4	3.4
Premises and equipment	4.9	3.1
Professional consulting services	2.9	2.8
Communication and travel	1.0	0.8
All other	2.9	1.1
	\$39.9	\$30.3

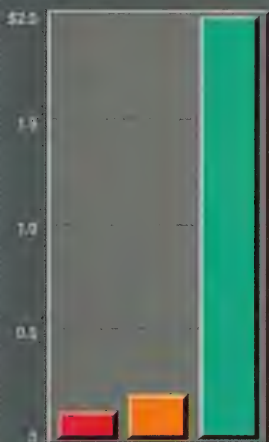




## STATEMENT OF CORPORATE GOVERNANCE PRACTICES

### INVESTMENT EXPENSES

Cost per \$100 of assets



Teachers' Pension Fund  
Average Pension Plan  
Average Mutual Fund

### Merchant Banking Group

(from left to right)

Roy Graydon (Portfolio Manager),  
Robert Bertram (Senior Vice  
President, Investments), Mark  
MacDonald (Portfolio Manager),  
Dean Metcalf (Portfolio Manager),  
Kathleen Cira (Manager Business  
Development)

The Toronto and Montreal stock exchanges require listed companies to disclose their system of corporate governance as a condition of continued listing on the exchange. In our view, effective corporate governance helps to ensure that a company's resources are devoted primarily to enhancing long-term value. We have chosen to comply with the disclosure requirements because:

- we believe we should measure our own behavior by the standards we expect of others; and
- we provide pension services to approximately 300,000 individual customers who have the right to know how their pension plan is governed and managed.

Of the 14 TSE guidelines, all but one apply to the pension plan. The suggestion recommends that a board committee nominate new directors. In our case, this is done under the partners' agreement by the plans co-sponsors. We comply generally or specifically with the remaining 13 guidelines.

### MANDATE OF THE PENSION PLAN CORPORATION

The Ontario Teachers' Pension Plan Board is an independent corporation (without share capital) established on January 1, 1990 by the *Teachers' Pension Act*. This Ontario statute requires the corporation to administer the pension plan, manage its investment assets, and pay members and their survivors the benefits promised. Specifically, the *Teachers' Pension Act* states: "The Board shall administer the pension plan and manage the pension fund in accordance with this Act, the *Pension Benefits Act* (Ontario), and the *Income Tax Act* (Canada)."

The plan is a defined benefit pension plan registered under the *Pension Benefits Act* and the *Income Tax Act*. The *Pension Benefits Act* defines the fiduciary duties of all pension plan administrators in Ontario and obliges them to administer the plan and invest assets with the same prudence expected of a person dealing with another's property. The standards of conduct expected of a fiduciary are also set out in common law.

The *Teachers' Pension Act* provides for the joint sponsorship of the pension plan by the Ontario government, through the Minister of Education and Training, and the executive of the Ontario Teachers' Federation (OTF), as the representative of plan members.

An agreement signed by the partners effective January 1, 1992 sets out the terms of joint sponsorship. The partners are equally responsible for plan losses and gains. A six-member partners' committee is responsible for changes in plan design and benefit levels. The agreement deals with the appointment of the board of directors and delineates the board's powers and

## STATEMENT OF CORPORATE GOVERNANCE PRACTICES

more strict than those set out in legislation. The members of the partners' committee and not members of the board of directors.

### COMPOSITION OF BOARD OF DIRECTORS

The law, the annual obligations is required to act independently of the sponsoring partners and to make decisions in the best interests of all beneficiaries. That is, the active teachers, former teachers and retired teachers who are plan members, as well as the survivors of deceased members. In this respect, the interests of the beneficiaries is similar to that of any corporation; they are required to act in the best interests of the corporation and its shareholders generally, and not in the interests of any specific group of shareholders.

Each partner appoints four directors and together the partners name the board of the ninth director. Ted Medland, former chief executive of a major government insurer, has served as chair since the beginning of 1996.

The partners name directors based on the relevance of their expertise and experience to the mandate of the corporation. No member of management is a director. Of the two partners, only the OTF has a direct representative on the board – the secretary of one of the five affiliates of OTF who is also a member of OTF's board of governors.

### BOARD COMMITTEES

There are four board committees:

1. *The investment committee*, which reviews the investment policies and approves, approves annual performance objectives for each investment portfolio and approves all transactions that exceed the discretionary limit set for management. This committee includes all directors.
2. *The audit and financial committee*, which reviews the annual financial statements, recommends the appointment of the external auditors and the independent company, and receives their reports. It also receives the report of the internal auditor. The committee consists of five directors.
3. *The benefit administration committee*, which rules on disputes between plan members and board staff about pension benefits. This committee includes two board members as well as 11 non-board members nominated by the partners and approved by the board. Disputes are heard by panels composed of the two board members and four other committee members.
4. *The human resources and compensation committee*, which approves the salary and annual performance bonuses and long-term performance bonuses for employees. It also reviews succession planning and key employee development. This committee consists of the full board.

### MEMBER PROFILE as at December 31, 1996





## **Portfolio managers are rewarded annually for achieving four-year performance targets.**

The board does not have a corporate governance committee. Governance issues are dealt with by the full board in the normal course of business.

### **EFFECTIVENESS OF BOARD**

An orientation program is in place for directors to assist them in understanding their fiduciary and governance duties. All directors attend special sessions on specific technical issues, such as the actuarial valuation of liabilities and the use of derivative contracts. Education is provided by outside experts as well as staff specialists.

The fact that each director is appointed for a term of two years and can only serve four consecutive terms, ensures that the members consider the qualifications and effectiveness of individual directors on a continuous basis.

In 1996, the board and the investment committee met 13 times, the audit and actuarial committee seven times, and the compensation committee three times. The benefits adjudication committee held five open meetings and met once during the year.

### **INDEPENDENCE OF BOARD**

The structure of the board, and the process for appointing directors, ensure that the board of directors is able to operate independently of management.

To ensure access to external sources of important information, the directors meet from time to time with outside advisers on general topics, as well as with external investment managers. Furthermore, the audit and compensation committee consults directly with the internal and external auditors, an independent actuary and reviews the auditors' findings on the effectiveness of internal controls.

Individual directors can engage an outside adviser, with the approval of the chair, at the organization's expense in appropriate circumstances.

### **ROLE OF MANAGEMENT**

Ongoing plan administration and investment management is delegated by the board of directors to the chief executive officer and his staff. The CEO manages two core businesses — customer services and investment services — each supported by general corporate services. This is one of few mutual pension organizations that provides personal services directly to its members rather than through their employers. In this respect, the pension plan board is a substantial customer service organization.

The structure of the board ensures that the board of directors is able to operate independently of management.

## STATEMENT OF CORPORATE GOVERNANCE PRACTICES

### MANAGEMENT PERFORMANCE

To ensure the interests of management and plan beneficiaries are closely aligned, senior staff receive annual and long-term bonuses based on the achievement of pre-set performance targets approved by the directors. The board requires management to set annual corporate objectives as well as longer-term business strategies. The objectives are accompanied by an annual financial plan for fund investment and plan administration.

The strategy for investments is expressed in the *Statement of Investment Policy and Goals*, which the board reviews annually. This document sets out, for example, the long-term asset mix policy as well as the need for the fund to achieve investment returns that exceed the rate of inflation by 4.5 percent.

The board also regularly reviews the strategies for active management of assets. Portfolio managers are rewarded annually for achieving four-year performance targets. In the case of pension plan administration, executives are required to meet annual and four-year performance targets for improvements in the quality of services delivered to members as measured by regular surveys of member opinions, and the effectiveness of managing operating costs.

Every year, the board receives an actuarial valuation of the plan's financial viability and an audited financial statement. The directors also annually review the investment and non-investment risks faced by the organization, and the adequacy of procedures to deal with those risks. In addition, the balance sheet and performance of each investment portfolio is reviewed every quarter.

### ACCOUNTABILITY AND COMMUNICATIONS

The board has made accountability to the partners and disclosure of activities to plan members the cornerstone of its communication policy. This policy acknowledges that plan beneficiaries have a right to know how their contributions are spent and invested.

As noted, this annual report complies with the disclosure requirements for public companies, which are more onerous than those imposed on pension funds. We maintain direct contact with plan beneficiaries — our “shareholders” and customers — through newsletters and annual statements, focus groups, quality-of-service surveys, presentations to teachers approaching retirement, management presentations to teacher organizations, meetings with the pension representatives of teachers' unions and the association representing pensioners, and daily telephone discussions and correspondence. We are accountable to members dissatisfied with staff decisions through the benefits adjudication appeal process.



#### Research and Economics

(from left to right)

Leo de Bever (Vice-President), Jane

Safrance (Investment Analyst),

Zev Frishman (Manager

Quantitative Products), Barbara

Zien (Assistant Portfolio Manager).



## MANAGEMENT'S DISCUSSION AND ANALYSIS

This section of the Annual Report elaborates on the information contained in the audited financial statements to assist readers in viewing the plan's financial position and performance through the eyes of management.

### PENSION PLAN OBJECTIVES

The plan is required to deliver defined benefits to Ontario teachers during their retirement years. We manage the plan's assets to earn the best possible rate of return with a moderate level of risk, while attempting to avoid increases in contribution rates.

Our investment policy is expressed in a document entitled *Stipulated Investment Policies and Goals*, which is reviewed annually by the management directors and filed with the Pension Commission of Ontario.

### INVESTMENT OBJECTIVE

Based on the current contribution rates of plan members and the government, the plan needs to earn an annual rate of return of 4.5 percent above inflation over the long term to satisfy its pension obligations. For the past thirteen years, the rate of return averaged 14.6 percent. Allowing for 1.0 percent average annual inflation, the real rate was 13.1 percent.

### ASSET MIX

Between 1990 and 1995, we achieved an asset mix of two-thirds equities and one-third fixed-income securities, although equities could range as high as 75 percent, depending on market conditions. In 1996, we redefined our policy to target 75 percent equities and 25 percent fixed-income securities, although equities can now range between 70 and 80 percent of total assets. At the end of 1996, 75 percent of assets generated an equity return.

The redefined asset mix should better match assets with the size and structure of the plan's liabilities. Our studies show that such an asset mix has a high probability of keeping the plan in a sound financial position over the long term, which enhances the security of future pension benefits.

### INVESTMENT CONSTRAINTS

Legislation requires us to "exercise the care, diligence and skill in the administration and investment of the pension fund that a person of ordinary prudence would exercise in dealing with the property of another" (subsection 22 (1) *Pension Benefits Act, Ontario*). Under the "prudent person" rule,

ASSET MIX  
as at December 31, 1996



## MANAGEMENT'S DISCUSSION AND ANALYSIS

we are expected to consider every type of investment product that would be appropriate for a modern investment portfolio. The investment staff's authority to invest in any particular product is set out in the *Statement of Investment Policies and Goals*.

Under the *Pension Benefits Act*, pension funds are restricted to owning no more than 30 percent of a company's voting shares and are generally prohibited from mortgaging or pledging assets as well as from borrowing, except for short-term contingencies.

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### INVESTMENT MANAGEMENT APPROACH

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Our mission is to actively manage as much of the fund as possible to create extra value as measured against the performance of the markets in which we invest. Growth in the plan will increasingly come from investments now that pension payments exceed member contributions.

We employ approximately 120 professionals to implement our value-added strategy. They include specialists who monitor and evaluate investment risk and conduct economic and investment research; managers and analysts who make buy and sell decisions in various asset classes; and professionals responsible for accounting, independent valuations, policy compliance, systems, and performance measurement.

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### VALUE CREATION

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Over 80 percent of value creation is derived from the establishment of a long-term asset mix appropriate to the liabilities of the fund. However, we can take advantage of short-term market opportunities by varying the weighting of the different investment classes within the asset mix. We can also improve returns through the selection and trading of stocks and bonds.

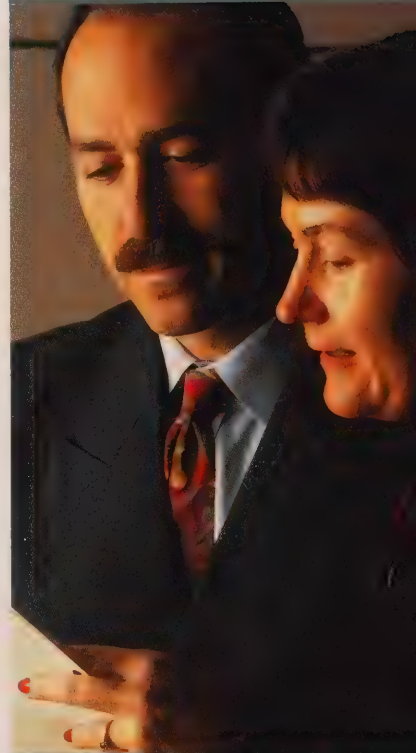
These management approaches have created more than \$1.4 billion of extra value in the fund over the last four years. This additional wealth is the excess of the fund's actual performance over the rate of return for a composite benchmark that reflects the performance of markets in which we invest. (Its performance against benchmarks is discussed on page 20.)

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### USE OF DERIVATIVES

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We use derivative contracts, such as swaps, futures, forwards and options, to shift the asset mix from fixed-income returns to equity returns, to manage interest rate volatility, and to manage foreign currency exposure. These



**Core International and  
Fixed Income**  
Neil Petroff (Vice-President)  
Barbara Trott (Portfolio Manager)

**We consider  
every type of  
investment  
product that  
would be  
appropriate for  
a modern  
investment  
portfolio.**



## Starting in 1997, all derivative contracts are marked to market daily.

### INVESTMENTS BY PORTFOLIO

Assets	1996	1995
Fixed income	\$12.0	\$13.6
Canadian active equity	2.7	2.1
Canadian index equity	13.8	9.5
U.S. equity	6.0	5.0
Europe-North American equity	9.8	7.0
Real estate	1.2	1.1
Merchant banking	1.0	0.7
	\$46.3	\$39.0

contracts are supported by appropriate underlying assets and involve transactions with total notional values of \$46.4 billion. Starting in 1997, all derivative contracts are marked to market daily; previously, some were done weekly.

The plan also takes derivative positions with the intention of enhancing overall returns. Throughout this report, the effects of derivatives are included in the value of investments, investment income, and rates of return.

Derivatives provide flexibility in implementing our investment strategy. For example, it is quicker and cheaper to acquire a return on a market index, such as the Standard & Poor's 500 on the New York Stock Exchange or the FTSE 100 index on the London Stock Exchange, utilizing equity swaps than by purchasing stocks of the individual companies included in the index.

### RISKS AND RISK MANAGEMENT

Policies and procedures exist for managing investment risks. We are committed to continuous improvement of risk management practices and will be introducing a process for monitoring the "Value at Risk" in each portfolio on a daily basis. We have enhanced our computer models for matching the risks between assets and liabilities so that we can measure the impact of changes in interest rates and other factors on the plan's financial position more frequently.

Among the most important risks faced by the plan are asset/liability matching, interest rate volatility, stock market volatility, liquidity risk, credit risk, and foreign currency risk.

### ASSET/LIABILITY MATCHING

The plan has promised to pay members and their survivors approximately \$42 billion in present and future pensions throughout their lives. Our goal is to select investments that produce acceptable rates of return to meet these obligations over coming decades.

If we were able to eliminate all investment risks, the rewards in terms of returns would be low and member contributions would need to be higher. If, however, we focused solely on earning the highest rates of return, results would be volatile and the risks would be greater, although contributions might be lower. Our goal is to select an asset mix that balances risks and rewards and avoids increases in contribution rates.

The dominant determinant of a fund's long-term performance is its asset mix. Furthermore, diversification across various asset classes is the

## MANAGEMENT'S DISCUSSION AND ANALYSIS

single most important investment management tool for reducing volatility and risk.

The plan's liabilities currently have a duration of approximately 14 years. These liabilities are largely matched by equities, which are typically considered to average 15 years.

However, 42 percent of the plan's underlying investments are non-marketable Ontario debentures, the last of which mature in 2012. These investments, combined with bonds and other debt investments, provide greater risk exposure than desired. We use derivatives to manage the returns on the debentures, primarily by shifting them into equity equivalents. At December 31, 1996, we had \$16.3 billion in interest-rate swaps with major financial institutions. We also exchanged floating-rate interest on \$9.7 billion of debentures for equity returns using equity swaps. These transactions are summarized in note 2b to the financial statements. In this process, we retain ownership of the underlying debentures and swap only the interest, not the principal. We do not assume additional market risk by using equity swaps compared with making direct cash investments in equities.

When fixed-income investments are combined with equities, total assets have an average duration of 13 years.

### INTEREST RATE VOLATILITY

Our liabilities are sensitive to changes in our expectations of long-term investment returns, rates of inflation and growth in teachers' salaries. Note 2d discusses the sensitivity of liabilities to real and nominal rate of return changes over the long term. Declining real rates of return over many years could, for example, put pressure on the contribution rates required to meet pension obligations. Conversely, sustained increases in real rates would have the opposite effect.

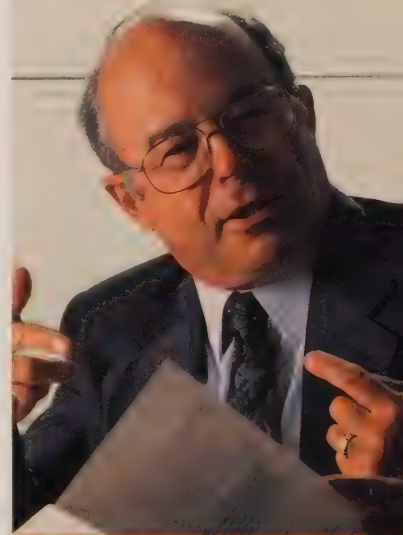
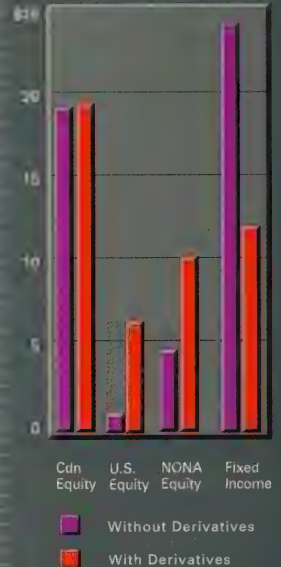
We estimate that a one percent change in interest rates results in a 14 percent change in the pension liabilities and a 6.7 percent change in the value of fixed-income assets. We manage interest rate volatility on fixed income assets by using derivative contracts such as interest rate swaps, futures, forwards and options. In 1996, we extended the duration of fixed-income assets from 4 years to 7 years through the use of these instruments.

### STOCK MARKET VOLATILITY

Having a large stock portfolio exposes us to market volatility, with a negative return anticipated about once in every five years. In North America, markets

#### EFFECT OF DERIVATIVES

as at December 31, 1996  
(\$ billions)





## Canada remains our primary equity market, where we have \$17.1 billion.

have not experienced a large correction in more than seven years and may be overvalued by historical standards. However, the long-term performance expectation of corporate shares outweighs the risks of short-term cyclical volatility.

We are further exposed to market volatility because of the fund's size relative to the Canadian stock market, which represents just under three percent of global markets. The fund's size constrains the ability to move in and out of the market, a situation exacerbated by the fact that the shares of many leading Canadian corporations are closely owned. Control blocks represent approximately 20 percent of the market value of TSE 300 shares on the Toronto Stock Exchange, leaving an available capitalization of \$442 billion for investors seeking equity opportunities.

Part of our risk management strategy is to reduce dependence on the Canadian economy by diversifying globally to take advantage of other economies. This involves the use of both cash market purchases and derivative contracts. However, Canada remains our primary equity market, where we have \$17.1 billion invested in equities, followed currently by the United States with \$6.2 billion, Japan with \$2.5 billion and Britain with \$1.8 billion.

### Core Domestic (from left to right)

Morgan McCague (Vice-President),

Terry Horaski (Portfolio Manager),

Krish Krishnan (Manager

Quantitative Analysis)

### LIQUIDITY RISK

After payment of pension benefits and operating costs, cash available for new investment totalled \$7.3 billion in 1996. Cash flow increased by \$450 million annually starting in August 1996 when the government resumed the special payments it has promised to make until 2029 to eliminate the pre-1990 unfunded liability.

The cash needs for pension payments and operating expenses are predictable. Potentially the most unpredictable cash requirement relates to equity swap contracts, which can have terms up to five years. However, every three to six months we receive any gains accumulated on these contracts and pay any losses to counterparties. This reduces our liquidity and credit risks. This cash collateral, along with marketable short-term securities, annual cash flow, and other liquid assets, ensures that we have sufficient cash reserves (\$2.2 billion) in the event of a major decline in asset values.

To manage liquidity risk, we are using a stress-testing model to simulate improbable market conditions and abnormal market swings so that we can determine their potential impact on our cash reserves under "worst case" situations.



## MANAGEMENT'S DISCUSSION AND ANALYSIS

### CREDIT RISK

Every time we make an investment we are exposed to credit risk in the event the security issuer defaults on payments or becomes insolvent. Credit risk exists with security issuers, such as governments and corporations, as well as with counterparties, such as financial institutions and investment dealers with whom we have investment contracts.

The largest credit exposure, as discussed in note 2e to the financial statements, is the Province of Ontario, which owes the plan \$19.4 billion of non-marketable debentures and \$1.3 billion in contributions receivable.

In the case of security issuers and derivative counterparties, we monitor credit risk on a continuing basis and, depending on the credit rating, restrict debt and equity investment in a single corporation or financial institution to between one and three percent of our total assets.

In the case of swap counterparties, we only deal with those that have ratings of A and higher. The settlement of gains and losses on equity swaps every three to six months substantially reduces the potential impact of a counterparty defaulting on its contractual obligations.

### FOREIGN EXCHANGE RISK

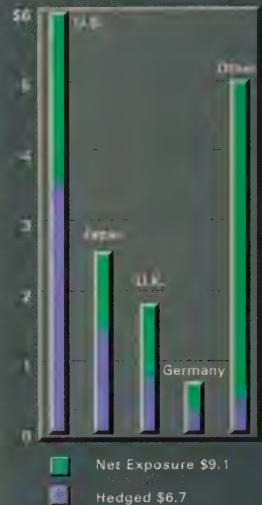
Only 12 percent of our cash investments are outside Canada, although 15 percent of total fund returns are derived from foreign sources, principally through the use of derivatives.

When we make foreign investments, changes in the relative value of the Canadian dollar can add to, or subtract from, our returns. In 1995, we augmented foreign investment returns by partially hedging exposures to the Japanese yen and U.S. dollar. In 1996, currency hedging was expanded to the British pound, German mark, Swiss franc and French franc. Currently, our policy is to hedge approximately 50 percent of our equity exposure in these six currencies. This level permits considerable flexibility in managing foreign exchange movements. We had \$6.7 billion of foreign currency hedges in place at the 1996 year end.

### INVESTMENT PERFORMANCE

Each portfolio is measured against a benchmark that tracks the average results of the markets in which we invest. To the extent we exceed market averages, we can identify the value that our active management has added to each portfolio. The benchmarks used include the TSE 300 for Canadian

**CURRENCY EXPOSURE**  
as at December 31, 1996  
(\$ billions)





## Over the past four years, the plan's average annual performance was 14.6 percent.

### RATE OF RETURN COMPARED TO BENCHMARK

	1996	Benchmark
Fixed income	11.8%	13.4%
Canadian equity	29.4	28.3
U.S. equity	23.0	23.4
Non-North American equity	11.2	6.6
Real estate	7.0	5.4
Merchant banking	38.4	30.3
Overall	19.0%	18.1%

### 4-YEAR AVERAGE RATE OF RETURN COMPARED TO BENCHMARK

	4-year average	Benchmark
Overall	14.6%	13.5%

#### Foreign Exchange Trading

(from left to right)

Steve Quigley (Portfolio Manager),

Bruce Ford (Senior Trader), Kal

Patel (Senior Analyst)

equities; the S&P 500 for U.S. equities; the EAFE index for equities in Europe, Australia and the Far East; the Frank Russell Canada Property Index for real estate; and the Scotia McLeod Canada bond index for bonds.

We measure total fund return against a composite benchmark, which aggregates the returns for each portfolio benchmark, using our investment policy weights. Total fund performance is also compared with our long-term objective of exceeding inflation by 4.5 percent.

### 1996 TOTAL FUND PERFORMANCE

The pension fund registered a 19.0 percent rate of return in 1996, compared with the composite benchmark return of 18.1 percent. Exceeding the benchmark by 90 basis points added \$400 million in value. After inflation, the return was 16.8 percent, compared with 15.2 percent in 1995.

In 1995, we reported a 16.9 percent investment return, compared with 17.2 percent for the composite benchmark.

### FOUR-YEAR RETURNS

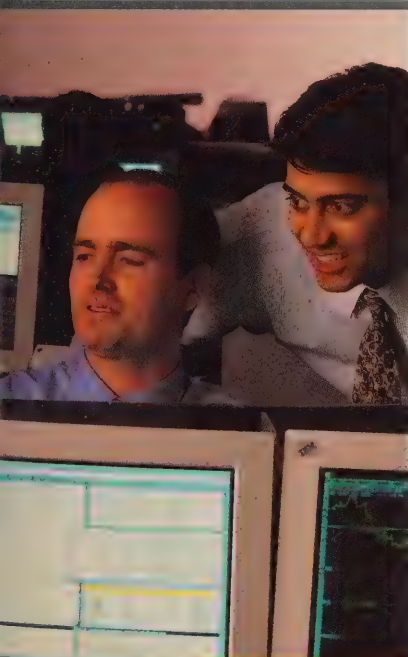
A longer-term measure has greater relevance, greater reliability and less volatility than measuring one-year performance. A common standard used in the pension fund industry is to calculate average performance over a four-year cycle. Over the past four years, the plan's average annual performance of 14.6 percent exceeded the benchmark rate of return by more than one percent. The real rate of return, after inflation, was 13.1 percent, well in line with our goal of exceeding inflation by 4.5 percent over the long term. Clearly, exceeding our goal to this degree is not sustainable over the long term.

### CHANGE IN VALUE OF INVESTMENTS

Net investments increased to \$46.3 billion in 1996, compared with \$37.6 billion at the end of 1995. The increased value reflected strong Canadian and foreign equity markets, the further shift in our asset mix to equities, and the increased value of the long-term debenture portfolio in response to falling interest rates.

### EQUITY INVESTMENTS

Equities totalled \$34.3 billion, or 75 percent of all investments at the end of 1996, compared with \$25.4 billion, or 65 percent of all investments at the end of 1995. The composition of this asset class is shown in the chart on page 22.



## MANAGEMENT'S DISCUSSION AND ANALYSIS

Approximately \$9.7 billion, or 28 percent, of equity exposure is in the form of equity swaps, compared with \$8.3 billion, or 33 percent, in 1995.

**Canadian index funds** We have established index funds that contain the shares of Canada's major public corporations as listed in the TSE 300 index. At year end, we had \$13.8 billion invested in index funds, representing 3.1 percent of the outstanding float (that is, excluding control blocks) of the TSE 300 index.

Investing in index funds incurs transaction costs. Consequently, index funds are expected to match the returns of the index less transaction costs. For the past four years our index funds have generated returns in excess of the indices. We have achieved this through a variety of methods, including astute trading and anticipating changes in the composition of the TSE 300 index.

The TSE 35 index is composed of the shares of Canada's largest corporations with good liquidity, while the TSE 200 index consists of smaller companies, many of which have limited shares available to the public.

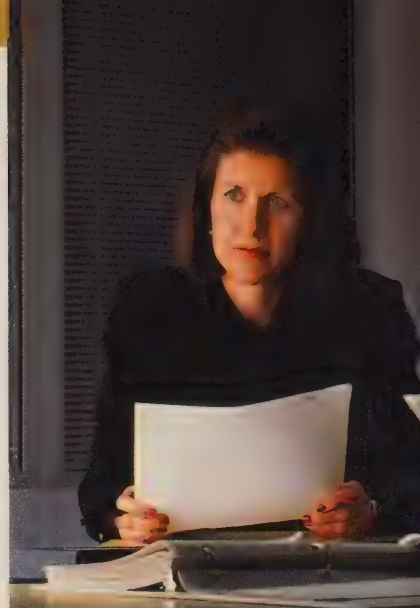
The size of the fund's index portfolios in relation to the Canadian stock market necessitates that we take care in our buy and sell decisions to neither disrupt the market nor signal our intended actions. We accomplish this by using a variety of different techniques, including block trading for large transactions in particular stocks, and basket trading where we trade a group of different stocks in a single transaction.

In 1996, the plan's Canadian index funds produced returns of 28.4 percent, or 10 basis points above the composite benchmark for index funds.

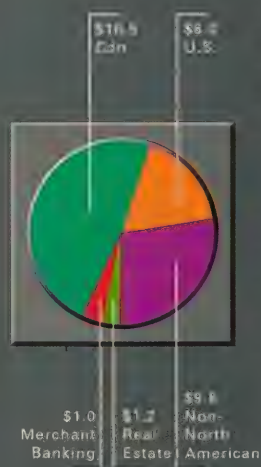
**Canadian actively managed equities** We ended 1996 with \$2.7 billion of actively managed Canadian stocks, of which the shares in 33 companies constituted 80 percent of the portfolio.

The most important principle behind our actively managed investment approach is that we look for value. Rather than buying stocks on an industry basis, we select the shares of individual companies that we consider to be undervalued and analyze each company's financial performance, operations, industry position, management quality, long-term business plan, board structure and board independence. This work is done by staff teams of portfolio managers and stock analysts.

We invest in companies with both large and small capitalizations, although our emphasis is on large cap firms because of their greater share liquidity. The best investment opportunities often occur when the economy



**EQUITY PORTFOLIO**  
as at December 31, 1996  
(\$ billions)





## **The U.S. market produced excellent results in 1996.**

or an industry outlook is negative; conversely, the best sell opportunities are often when optimism is pervasive.

It can take several years for the market to recognize the value of a company's shares, hence the patience of our long-term approach. When gains materialize, we do take profits, although we do not necessarily liquidate our entire position in a company.

In 1996, our equity portfolio benefitted from its heavy weighting in financial services, utilities and oils, and its underweighting in gold and other metals.

The actively managed Canadian stock portfolio produced a 31.5 percent return in 1996, compared with 28.3 percent for the TSE 300 index.

*Quantitative stock portfolios* We introduced new portfolio management techniques in 1996 based on quantitative research. We developed an accurate historical Canadian equity data base to test different investment strategies to determine which have the greatest probability of success. In September 1995, we created a portfolio based upon price and earnings momentum that performed well above the TSE 300 index in 1996.

Two further quantitative portfolios have been developed. One attempts to anticipate which investment style — focusing on growth stocks, value stocks, large companies or smaller companies — is likely to be favoured by the market so that we can shift the composition of the portfolio to our best advantage. Using artificial intelligence to sift economic data, the other portfolio identifies stocks that are likely to outperform the market.

*Foreign index funds* Approximately \$12.4 billion was invested at the end of 1996 in foreign stock market indices primarily through the use of derivative contracts. These investments are made by our staff specialists. They exchange the fixed income on Ontario debentures for floating rate interest and then exchange these cash flows for equity returns in the United States and overseas.

At the 1996 year end, we had exchanged \$4.4 billion of debentures for returns on the Standard & Poor's 500 index on the New York Stock Exchange and \$5.2 billion for returns on the indices of select Asian and European markets. These investments were worth \$5.5 billion and \$5.4 billion respectively at year end. The U.S. market produced excellent results in 1996.

With the addition of Spain in 1996, non-North American equity swaps are now contracted in nine countries. Japan represents the largest

### **Equities Portfolio**

Heather Hunter (Vice-President),  
Keith Graham (Portfolio Manager),  
Bill McRae (Manager Equity  
Trading), Brian Gibson (Small Cap  
Portfolio Manager), Geoffrey  
MacDonald (Assistant Portfolio  
Manager)

## MANAGEMENT'S DISCUSSION AND ANALYSIS

commitment, followed by the United Kingdom and other European stock

### market indices

We earned a return of 6.8 percent on foreign index funds in 1996, compared with 6.6 percent for benchmarks used for these investments.

**Foreign actively managed equities** Our equity investments include \$3.2 billion of non-North American stocks which are actively managed for us by six external fund managers with intimate knowledge of selected European and Asian markets.

European and Hong Kong stocks, which were over-represented in our foreign portfolio, performed well in 1996. The portfolio was under-represented by Japanese stocks, where both the market and yen lost ground.

We earned a return of 19.7 percent on non-North American stocks in 1996, compared with 6.6 percent for benchmarks used for these investments.

**Foreign exchange hedging** In 1996, we continued our policy of considering separately the expected performance of foreign equities and the impact of movements in major currencies on investments. We now hedge approximately 50 percent of investments involving the Japanese yen, U.S. dollar, British pound, German mark, Swiss franc and French franc. This policy is designed to reduce the volatility of returns.

**Merchant banking** Our equity investments include a \$1.0 billion merchant banking portfolio. We apply corporate, financial and strategic skills to these investments in private and select public companies in the expectation of returns at least 200 basis points higher than the TSE 300 index. We have made 15 merchant banking investments over the past five years in Canada and internationally.

We invested more than \$270 million in 1996. The biggest investment was \$68 million in support of the management-led buyout at Sun Media Inc., a diversified company that employs 3,500 people at 9 daily and 59 weekly community newspapers, and 15 specialty magazines. The Sun is the largest privately held newspaper group in Canada and the third largest newspaper publishing organization.

The merchant banking portfolio is one of Canada's largest active investment pools in assisting growth companies to fulfill their potential. We maintain strategic relationships with other merchant banks, brokerage houses, and managed funds in Canada, the United States, Europe and southeast Asia. These alliances enable us to invest on a pooled basis with other institutions.

**NON-NORTH  
AMERICAN EQUITIES**  
as at December 31, 1996

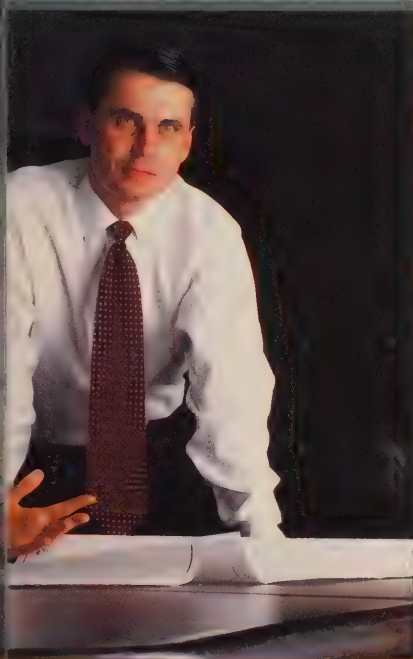




## Investment decisions made earlier in the market downcycle are paying off.

We earned a return of 19.7% on our actively managed non-North American stocks in 1996, compared with 6.6% for the benchmark.

**Real Estate** (from left to right)  
Alan Miller (Portfolio Manager),  
Shawn Jamal (Portfolio Manager),  
Ugo Bizzarri (Assistant Portfolio  
Manager), Brian Muzyk (Vice-  
President)



In 1996, we realized profits on several investments made in previous years that had gained substantial value. Merchant banking produced returns of 38.4 percent, compared with the benchmark return of 30.3 percent.

**Real estate** The \$1.2 billion real estate portfolio represents almost 4 percent of total fund investments. Approximately 84 percent of the portfolio is direct ownership of income-producing properties and 16 percent is share ownership in a large private real estate company. These amounts reflect \$250 million in mortgages, as shown in note 2c.

The real estate portfolio contains 8.2 million square feet of rentable area consisting of 5 downtown office complexes, 11 regional shopping centres and industrial properties in business parks in Ontario and western Canada. Our office property portfolio is concentrated in Vancouver and Toronto. In the case of shopping centres, we continue to consider properties that are either in major markets or dominate the trading area in secondary markets.

The supply of Canadian properties that meet our investment criteria in terms of quality, economic mass and location is very limited. In 1996, we reviewed more than a billion dollars' worth of real estate. Our only investment was the purchase of the 50 percent interest we did not already own in three office properties in Vancouver.

We own a 20 percent equity interest in Cadillac Fairview Corporation, a Toronto-based company that owns and manages a \$3 billion property portfolio in Canada and the United States. Its assets include interests in the Eaton Centre in Toronto and the Pacific Centre in Vancouver. During 1996, we worked with other shareholders on a restructuring program that positions this company for growth under new management.

We have been building our real estate portfolio since 1991. Investment decisions made earlier in the market downcycle are paying off. In fact, 1996 marked the fifth consecutive year in which our portfolio performed above the benchmark for institutional investment in real estate. The portfolio earned a return of 7.0 percent, compared with 5.4 percent for the benchmark. Cash flow, which is an important measure of real estate performance, grew to \$89 million from \$87 million in 1995.

### FIXED-INCOME INVESTMENTS

Fixed-income securities include the Ontario debentures, bonds, money market investments, and interest-rate derivative contracts. This asset class totalled \$12.0 billion, or 25 percent of fund investments, at the end of 1996,

## MANAGEMENT'S DISCUSSION AND ANALYSIS

compared with \$13.6 billion, or 35 percent of total investments, a year earlier. The reduction of fixed-income securities as a proportion of total investments reflects the change in asset mix policy introduced in 1996.

The largest component of the portfolio is \$7.2 billion of non-marketable Ontario debentures, after the effect of derivatives. The debentures are detailed on page 53. The marketable bond component of the portfolio consists of \$509 million of Government of Canada bonds and \$336 million of global bonds. We also began to invest in corporate bonds in 1996, which totalled \$107 million at year end. Money market securities totalled \$2.2 billion.

In 1996, the fixed-income portfolio had a 11.8 percent rate of return, compared with 13.4 percent for the composite market benchmark. The debenture portfolio contributed strong returns, while the bond portfolio fell short of the benchmark. The average return over the past four years was 9.9 percent, compared with 10.8 percent for the benchmark. We have reorganized the portfolio as a first step to correcting these results.

**Debenture portfolio** As discussed earlier, we reduce interest rate risk in the debenture portfolio by ultimately swapping the income for equity-based derivatives. Typically, this has involved swapping the income on long-term debentures in preference to those scheduled to mature in the short term.

In 1996, we changed the way we manage the debentures. We now swap the income on short-term debentures to create equity exposure and manage the unswapped long-term debentures in relation to our long-term liabilities. In this way, the value of the debentures moves in the same direction as the value of liabilities in response to interest rate changes. This policy has extended the duration of the total fixed-income portfolio from 4 to 7 years.

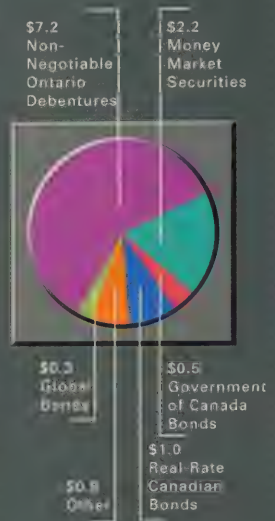
**Bond portfolio** We manage our bond portfolio, created through cash transactions, relative to the market benchmark. In 1996, we underperformed the general market. We maintained reduced interest rate sensitivity because we believed that markets had overcompensated for a slowdown in North American economic growth.

In the second half, however, the Bank of Canada repeatedly reduced interest rates in response to the strengthening Canadian dollar. The bank rate was reduced 13 times, declining from 5.8 percent at the start of the year to a 40-year low of 3.3 percent at year end. Bond values rallied to conclude 1996 with a strong performance, although our portfolio underperformed the benchmark.

### FIXED INCOME

as at December 31, 1996

(\$ billions)



### Fixed Income Trading

(from left to right) Denis Richardson  
(Portfolio Manager Global Bonds),  
Alan Wilson (Investment Analyst),  
Brian Olds (Portfolio Manager  
Swaps)





## Investment income in 1996 totalled \$7.4 billion.

Overall, global bond markets performed well in 1996, also in an environment of falling interest rates.

**Real-rate investments** The value of our holdings of real-rate Canada bonds decreased by \$11 million in 1996 to \$956 million. These securities have a real rate of return of 4.1 percent. We also own \$110 million of index-linked mortgages. These investments are completely risk-free with respect to inflation and are guaranteed by the federal government.

### CHANGE IN NET ASSETS

CHANGES IN NET ASSETS		
(\$ Millions)	1996	1995
<b>Income</b>		
Investment income	\$7,436	\$5,650
Contributions	1,445	1,305
	8,881	6,955
<b>Expenditures</b>		
Benefits	1,520	1,261
Operating expenses		
Customer services	29	27
Investments	40	30
	1,589	1,318
<b>Increase in net assets</b>	<b>\$7,292</b>	<b>\$5,637</b>

The plan began 1996 with \$40.1 billion in net assets available for benefits. As the accompanying table shows, income from investments and plan contributions totalled \$8.9 billion during the year.

Investment income in 1996 totalled \$7.4 billion, compared with \$5.7 billion the previous year. The improvement reflects positive results in all asset classes, with notable contributions from Canadian and foreign equities.

Contributions from teachers and the government were \$1.4 billion, a \$140 million increase during 1996.

Total customer services expenditures, of which 98 percent were pension payments to retired teachers and their survivors, increased by \$261 million to exceed \$1.5 billion.

As a result of these changes, net assets available for benefits grew by \$7.3 billion to \$47.4 billion at the 1996 year end.

### PAYMENTS TO RETIREES

The plan paid \$1.4 billion in pensions during 1996, an increase of \$140 million since 1995. The increase principally reflected a higher number of teachers starting pension — 5,008 bringing to approximately 53,000 the number of pensioners and their survivors receiving benefits.

In addition, the plan paid \$74 million to make up for past deficiencies in pensions recalculated under the pension entitlement review program discussed on page 8. In 1995, we paid out \$4 million under this program. In January 1997 a further \$78 million was paid out.

Pension payments in 1996 reflected a 1.6 percent cost-of-living adjustment for pensioners. The plan requires an averaging method for calculating the inflation adjustment rates for pensions which is different than the

## MANAGEMENT'S DISCUSSION AND ANALYSIS

year-over-year rate of inflation. The inflation adjustment for January 1997 was also 1.6 percent.

### OPERATING EXPENSES

The costs of managing investments and administering the plan are small relative to the asset base and annual volume of financial transactions, but large in absolute dollars. These costs are discussed in detail in the President's Report on page 10.

### CALCULATING THE LIABILITIES

We manage the plan's assets to earn the best possible investment returns so that we can build a surplus of assets over liabilities as a cushion against unforeseen events. Our success in this respect is measured by two valuations — one at the end of each year in preparing our financial statements, the other once every three years in determining the contribution rates for plan members. Both valuations are prepared by an independent actuary and provide an opinion on the plan's financial condition.

### YEAR-END FINANCIAL CONDITION

The plan's accrued pension liabilities increased from \$38.7 billion to \$41.8 billion during 1996. The actuarial assumptions used to determine these liabilities reflect management's best estimate of expected long-term trends in investment returns, salaries, inflation and demographic factors. The main assumptions are set out in note 5 to the financial statements.

The actuarial value of net assets available to pay liabilities rose from \$38.2 billion to \$43.0 billion during 1996. As a result, the plan had a surplus of \$1.2 billion, compared with a deficiency of \$514 million a year earlier.

### ACCRUED PENSION BENEFITS

(\$ billions)	1996	1995
Accrued pension liabilities, beginning of year	\$38.7	\$36.8
Interest on accrued liabilities	3.4	3.2
Benefits earned	1.3	1.3
Benefits paid	(1.5)	(1.2)
	41.9	40.1
Changes in actuarial assumptions	0.5	(0.2)
Plan changes	0.2	—
Experience gains	(0.8)	(1.2)
Accrued pension liabilities, end of year	\$41.8	\$38.7

**INCOME**  
as at December 31  
(\$ billions)



We can build a  
surplus of assets  
over liabilities  
as a cushion  
against unforeseen  
events.



### CHANGE IN SURPLUS (DEFICIENCY)

(\$ Billions)	Actuarial Value of Net Assets	Accrued Pension Liabilities	Surplus (Deficiency)	Change (Increase) (Decrease)
1991	\$23.8	\$27.5	(\$3.7)	
1992	27.4	30.8	(3.4)	(0.3)
1993	30.8	34.0	(3.2)	(0.2)
1994	34.2	36.8	(2.6)	(0.6)
1995	38.2	38.7	(0.5)	(2.1)
1996	43.0	41.8	1.2	2.8

### BEST-ESTIMATE VALUATION ASSUMPTIONS

(at December 31)	1996	1995
Rates of return on investment	8.25%	8.75%
Salary escalation rates	4.50%	5.00%
Inflation rates	3.50%	4.00%

The deficiency has been reduced over the past five years from a peak of \$3.7 billion at the 1991 year end, as shown in the accompanying table. This reduction reflects changes in assumptions, low inflation and wage increases and good investment returns.

### FUNDING VALUATIONS

In accordance with the *Pension Benefits Act*, the funding valuations use more conservative actuarial assumptions than the annual best estimate valuations. In addition, they take into consideration future benefits, special payments and contributions, while the best estimate valuations reflect only benefits earned and the value of the assets on the date of the valuation.

The initial funding valuation on January 1, 1990 indicated an unfunded liability of \$7.8 billion, primarily because contributions and investment income were insufficient to support promised benefits, particularly after 1976 when pensions were indexed to the Consumer Price Index. During the late 1970s and most of the 1980s, high inflation rates increased the value of benefits at a much faster rate than the increase in the assets. The province has agreed to pay the initial unfunded liability through a series of special payments from 1990 to 2029. To date, it has paid over \$1.0 billion. The present value of future special payments, which are treated as an asset in the funding

### FUNDING VALUATION RESULTS (\$ BILLIONS)

(January 1)	1996	1993
Value of assets at valuation date	\$38.3	\$29.4
Present value of future contributions	14.5	14.3
Present value of future special payments from Province	8.4	8.4
Total assets	61.2	52.1
Present value of future benefits	60.5	50.0
Gain	\$ 0.7	\$ 1.5

### FUNDING VALUATION ASSUMPTIONS

(as at January 1)	1996	1993	1990
Rates of return on investment	8.0%	8.0%	7.50%
Salary escalation rates			
1993 and 1994	—	2.0	—
Thereafter	5.0	5.0	—
Inflation rates			
1993 and 1994	—	2.0	—
Thereafter	4.0	4.0	—

## MANAGEMENT'S DISCUSSION AND ANALYSIS

valuations, will rise from \$8.4 billion at the beginning of 1996 to an estimated peak of \$12.2 billion by 2014 before declining and being eliminated as originally scheduled by 2029.

The second funding valuation on January 1, 1993 estimated an actuarial gain of \$1.5 billion due to favourable investment experience as well as revised assumptions about the future, such as lower salary and inflation rates. Under an agreement between the Ontario government and the Ontario Teachers' Federation, the government took this gain by eliminating \$1.2 billion of special payments between January 1993 and July 1996 and by reducing contributions to the plan by \$325 million in 1994 and 1995.

The third funding valuation, effective January 1, 1996, disclosed an actuarial gain of \$712 million. In January 1997, the partners agreed to use most of the gain to improve pension benefits for members and the remainder to ensure stable contribution rates.

### PENSION PLAN CONTRIBUTIONS

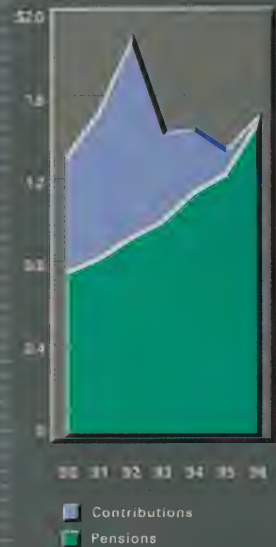
The independent actuary determines whether the contribution rates are at an appropriate level to fully fund the benefits promised to members. In determining the appropriate contribution level, economic and non-economic assumptions are considered, such as long-term trends in interest rates, inflation, salary projections and retirement rates. Ontario teachers currently contribute 7.3 percent of the first \$35,800 of salary and 8.9 percent on remaining salary to the pension plan. These contributions are matched in the aggregate by the provincial government. Following the January 1, 1996 valuation, contribution rates remained unchanged.

### FUTURE ISSUES AND TRENDS

The federal government is planning to restructure tax-exempt benefits for retirees, including pensions, although the details and impact of its proposals are not yet known. Nonetheless, serious uncertainties exist about the future status of the tax-sheltered component of pension income. As changes are inevitable, there is serious risk that the tax-exempt component will shrink.

We are seeing strong growth in our pensioner population relative to the active plan membership. Changes made by the partners in plan benefits could well accelerate the retirement rate in the near term. As it is, approximately half of our large membership of 155,000 teachers is expected to retire within 15 years. Adding volatility to this is uncertainty about the number of

**CONTRIBUTIONS VS PENSIONS**  
*as at December 31*  
(\$ billions)



Approximately  
half of our large  
membership of  
155,000 teachers  
is expected  
to retire within  
15 years.



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## **A major challenge for a fund of our size is the illiquidity of Canadian capital markets.**

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active teachers that will be recruited in the years ahead and will be contributors to the plan.

On the asset side of the ledger, Canadian federal law requires pension plans to invest at least 80 percent of their assets in Canada. This represents a large exposure to Canadian economic, market and political events. Approximately 90 percent of our assets are in Canada. Through the use of derivatives and cash investments, we have been able to separate a portion of our returns from investments outside the country. As a result, a small portion of our investment income is exposed to international events.

Within Canada, a major challenge for a fund of our size is the illiquidity of Canadian capital markets. The rapid growth in recent years of public and private pension funds has made them major investors competing for the same limited pool of shares in Canadian enterprises. Canadian pension funds would be able to operate more effectively on behalf of their members if foreign investment restrictions were removed as proposed by the Canadian Investment Association of Canada and supported by the Ontario Pension Plan Board.

In conclusion, Canadian capital markets will continue to be hampered by the ability of governments to deal with their budget deficits and accumulated debt. Recent fiscal actions by the federal government and most provinces are encouraging in this respect and should support investor confidence in Canada.

## MANAGEMENT RESPONSIBILITY FOR FINANCIAL REPORTING

The financial statements of the Ontario Teacher's Pension Plan have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must of necessity be based on estimates and judgements. The accounting policies followed in the preparation of these financial statements conform with generally accepted accounting principles. Financial information presented throughout the annual report is consistent with the financial statements.

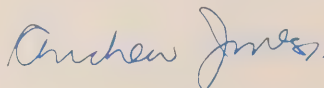
Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded and proper records maintained. These controls include quality standards in hiring and training of employees, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization. Internal controls are reviewed and evaluated by internal audit programs which are subject to scrutiny by the external auditors.

Ultimate responsibility for the financial statements rests with the Board of Directors. The board is assisted in its responsibilities by the Audit and Actuarial Committee, consisting of five directors who are not officers or employees of the plan administrator. In addition, the committee reviews the recommendations of the internal and external auditors for improvements in internal control and the action of management to implement such recommendations. In carrying out its duties and responsibilities, the committee meets regularly with management and with both the external and internal auditors to review the scope and timing of their respective audits, to review their findings and to satisfy itself that their responsibilities have been properly discharged. This committee reviews the financial statements and recommends them for approval by the board.

The plan's external auditors, Deloitte & Touche, have conducted an independent examination of financial statements in accordance with generally accepted auditing standards, performing such tests and other procedures as they consider necessary to express the opinion in their Report to the Administrator. The external auditors have full and unrestricted access to the Audit and Actuarial Committee to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal control systems.



CLAUDE LAMOUREUX  
PRESIDENT AND  
CHIEF EXECUTIVE OFFICER



ANDREW JONES  
VICE-PRESIDENT, FINANCE

February 14, 1997



## ACTUARIES' OPINION

WILLIAM M.  
MERCER  
LIMITED

William M. Mercer Limited was retained by the Ontario Teachers' Pension Plan Board (the "Board") to perform an actuarial valuation of the assets and the going concern liabilities of the Ontario Teachers' Pension Plan (the "Plan") as at December 31, 1996, for inclusion in the Plan's financial statements. As part of the valuation, we examined the Plan's recent experience with respect to the non-economic assumptions and presented our findings to the Board. In addition, we provided the Board with statistical, survey and other information used to develop their long-term economic assumptions.

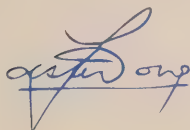
The valuation of the Plan's actuarial liabilities was based on:

- membership data provided by the Ontario Teachers' Pension Plan Board (the Board) as at December 31, 1995;
- methods prescribed by the Canadian Institute of Chartered Accountants for pension plan financial statements;
- assumptions about future events (for example, future rate of inflation and future rates of return on the pension fund) which have been communicated to us as the Board's best estimate of these events;
- the arbitration decision handed down to the Partners in January 1997 requiring plan changes effective January 1, 1997;
- revised estimates received from the Board on the cost of the entitlement review project; and
- information provided by the Education Relations Commission on negotiated wage settlements in the 1995/96 and 1996/97 school years.

The objective of the financial statements is to fairly represent the financial position of the Plan on December 31, 1996 as a going concern. This is different from the statutory valuation (the actuarial valuation required by the *Teachers' Pension Act*, and the *Pension Benefits Act*), which uses actuarial methods prescribed by the *Teachers' Pension Act* and cautious assumptions about future events to establish a prudent level for future contributions.

While the actuarial assumptions used to estimate liabilities for the Plan's financial statements represent the Board's best estimate of future events, and while in our opinion these assumptions are reasonable, the Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations, and will affect the financial position of the Plan, and the contributions required to fund it, at that time.

We have tested the data for reasonableness and consistency, and we believe it to be sufficient and reliable for the purposes of the valuation. We also believe that the methods employed in the valuation and the assumptions are, in aggregate, appropriate for the purposes of the valuation. Our opinions have been given, and our valuation has been performed, in accordance with accepted actuarial practice.



LESTER J. WONG, F.C.I.A.

February 13, 1997



MALCOLM P. HAMILTON, F.C.I.A.

## AUDITORS' REPORT TO THE ADMINISTRATOR



We have audited the statement of net assets available for benefits and accrued pension benefits and surplus (deficiency) of the Ontario Teachers' Pension Plan as at December 31, 1996 and the statements of changes in net assets available for benefits, changes in accrued pension benefits and changes in surplus (deficiency) for the year then ended. These financial statements are the responsibility of the Plan's administrator. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the net assets available for benefits and accrued pension benefits and surplus (deficiency) of the Plan as at December 31, 1996 and the changes in its net assets available for benefits, accrued pension benefits and surplus (deficiency) for the year then ended in accordance with generally accepted accounting principles.

A handwritten signature in blue ink that reads "Deloitte &amp; Touche".

CHARTERED ACCOUNTANTS

TORONTO, CANADA

*February 14, 1997*



STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS AND  
ACCRUED PENSION BENEFITS AND SURPLUS (DEFICIENCY)

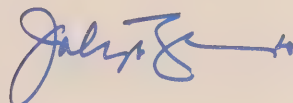
AS AT DECEMBER 31, 1996

(\$ Millions)	1996	1995
<b>NET ASSETS AVAILABLE FOR BENEFITS</b>		
<b>Assets</b>		
Investments (note 2)	\$49,594	\$40,341
Receivable from Province of Ontario (note 4)	1,286	1,308
Receivable from brokers	20	239
Cash	6	6
Fixed assets	5	3
	<u>50,911</u>	<u>41,897</u>
<b>Liabilities</b>		
Accounts payable and accrued liabilities (note 3)	<u>3,482</u>	<u>1,760</u>
<b>Net assets available for benefits</b>		
Actuarial asset value adjustment (note 5e)	<u>(4,416)</u>	<u>(1,907)</u>
<b>Actuarial value of net assets available for benefits</b>		
	<u>\$43,013</u>	<u>\$38,230</u>
<b>ACCRUED PENSION BENEFITS AND SURPLUS (DEFICIENCY)</b>		
Accrued pension benefits	\$41,833	\$38,744
Surplus (deficiency)	<u>1,180</u>	<u>(514)</u>
<b>Accrued pension benefits and surplus (deficiency)</b>		
	<u>\$43,013</u>	<u>\$38,230</u>

ON BEHALF OF THE BOARD:



CHAIR



BOARD MEMBER

# STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

FOR THE YEAR ENDED DECEMBER 31, 1996

<i>(\$ Millions)</i>	1996	1995
<b>Net assets available for benefits, beginning of year</b>	<b>\$40,137</b>	<b>\$34,494</b>
<b>Investment operations</b>		
Investment income (note 6)	7,436	5,656
Investment expenses (note 10a)	(40)	(30)
Net investment operations	7,396	5,626
<b>Customer service operations</b>		
Contributions (note 8)	1,445	1,305
Benefits (note 9)	(1,520)	(1,261)
Customer service expenses (note 10b)	(29)	(27)
Net customer service operations	(104)	17
<b>Increase in net assets</b>	<b>7,292</b>	<b>5,643</b>
<b>Net assets available for benefits, end of year</b>	<b>\$47,429</b>	<b>\$40,137</b>



## STATEMENT OF CHANGES IN ACCRUED PENSION BENEFITS

FOR THE YEAR ENDED DECEMBER 31, 1996

(\$ Millions)	1996	1995
<b>Accrued pension benefits, beginning of year</b>	<b>\$38,744</b>	<b>\$36,848</b>
<b>Increase in accrued pension benefits</b>		
Interest on accrued pension benefits	3,381	3,235
Benefits accrued (note 5a)	1,337	1,347
Changes in actuarial assumptions (note 5b)	455	(266)
Changes in plan provisions (note 5c)	258	—
	<b>5,431</b>	<b>4,316</b>
<b>Decrease in accrued pension benefits</b>		
Benefits paid (note 9)	1,520	1,261
Experience gains (note 5d)	822	1,159
	<b>2,342</b>	<b>2,420</b>
<b>Net increase in accrued pension benefits</b>	<b>3,089</b>	<b>1,896</b>
<b>Accrued pension benefits, end of year</b>	<b>\$41,833</b>	<b>\$38,744</b>

## STATEMENT OF CHANGES IN SURPLUS (DEFICIENCY)

FOR THE YEAR ENDED DECEMBER 31, 1996

(\$ Millions)	1996	1995
<b>Deficiency, beginning of year</b>	<b>\$ (514)</b>	<b>\$(2,606)</b>
Increase in net assets available for benefits	7,292	5,643
Change in actuarial asset value adjustment (note 5e)	(2,509)	(1,655)
Increase in actuarial value of net assets available for benefits	4,783	3,988
Net increase in accrued pension benefits	(3,089)	(1,896)
<b>Surplus (deficiency), end of year</b>	<b>\$1,180</b>	<b>\$ (514)</b>

## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

### DESCRIPTION OF PLAN

The following description of the Ontario Teachers' Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Pension Act* as amended.

(a) **GENERAL** The Plan is a contributory defined benefit pension plan co-sponsored by the Partners who are the Province of Ontario (the Province) and Plan members, represented by the Ontario Teachers' Federation. Contributions are made by active members of the Plan and matched by the Province and designated private schools and organizations. The Plan is registered with the Pension Commission of Ontario (registration number 0345785).

(b) **FUNDING** Plan benefits are funded by contributions and investment earnings. The determination of the value of the benefits and required contributions is made on the basis of periodic actuarial valuations (see note 7).

(c) **RETIREMENT PENSIONS** A retirement pension is available based on the number of years of credited service, best five-year average salary and age of the member at retirement. A member is eligible for a reduced retirement pension from age 55. An unreduced pension is available at age 65 or at any age if the sum of a member's age and qualifying service equals 90.

(d) **DISABILITY PENSIONS** A disability pension is available at any age to a disabled member with a minimum of 10 years of credited service. The type of disability pension is determined by the extent of the disability.

(e) **DEATH BENEFITS** Death benefits are available on the death of a member and may be available on the death of a pensioner. The benefit may take the form of a survivor pension, a lump sum payment or both.

(f) **ADDITIONAL CREDITED SERVICE** Members can obtain additional credited service in the Plan for certain absences or transfers from other plans.

(g) **WITHDRAWALS FROM THE PLAN** Subject to the lock-in provisions, withdrawal refunds, transfers and commuted value transfers are available when a member ceases to be employed in education prior to qualifying for an immediate pension.

(h) **INCOME TAXES** The Plan is a Registered Pension Plan as defined in the *Income Tax Act* and, consequently, is not subject to income taxes. The Plan's registration number is 0345785.

(i) **ESCALATION OF BENEFITS** Pension benefits are adjusted annually for inflation at 100 per cent of the Consumer Price Index, subject to a limit of 8 per cent in any one year with any excess carried forward.

(j) **RETIREMENT COMPENSATION ARRANGEMENT** The Retirement Compensation Arrangement (RCA) has been created to provide the members of the Plan with benefits that, due to limitations imposed by the *Income Tax Act*, cannot be provided under a registered pension plan. The net assets and accrued pension benefits of the RCA are not included in these financial statements.

# NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (a) BASIS OF PRESENTATION

These financial statements present the financial position and operations of the Plan and are prepared in accordance with generally accepted accounting principles.

### (b) INVESTMENTS

**Valuation of investments** Investments are recorded as of the trade date and are stated at fair value. Fair value is the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Province of Ontario Debentures (the Debentures), which are not marketable, are stated at estimated fair values calculated by discounting the Debenture cash flows based on year-end implied market yields of comparable securities. Money market, publicly traded bonds and equity securities are valued at year-end market prices. Other investments for which market quotations are not available such as real estate, mortgages and private placements are valued on a current market yield or appraised basis.

**Valuation of derivative contracts** Interest rate, foreign currency and equity futures, forwards, options, swaps, forward rate agreements and debt to equity derivative contracts are recorded at the estimated amounts that the Plan would receive or pay to terminate the contracts (marked to market) at the reporting date, with the resulting gain or loss being recognized in unrealized investment income.

Gains or losses on derivative contracts sold or closed out during the year are included in realized investment income.

**Securities purchased under agreements to resell** Securities purchased under agreements to resell, being securities which the Plan has purchased and simultaneously committed to resell at a specified price on a specified date, and the related securities sold, are recorded as of trade date and are stated at fair value. Interest income earned is included in income for the related investments.

**Securities sold under agreements to repurchase** Securities sold under agreements to repurchase, being securities which the Plan has sold and simultaneously committed to repurchase at a specified price on a specified date, are recorded as of trade date and are stated at fair value. Interest expense incurred is netted against interest income for the related investments.

**Securities sold but not yet purchased** Securities sold but not yet purchased, which represent the Plan's obligation to deliver securities which were not owned at the time of sale, are recorded as of trade date and are stated at fair value. Gains or losses are included in income for the related investments.

**Unrealized gains and losses** The change in the difference between fair value and the cost (being the purchase price) of investments at the beginning and end of each year represents the unrealized gain (loss) and is included in investment income.

**Accrual of income** Interest income, interest expense and dividend income has been accrued to the year-end date.



## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

### (c) FOREIGN CURRENCY TRANSLATION

Transactions denominated in foreign currencies are translated into Canadian dollars at the rates of exchange prevailing at the dates of the transactions. The fair value of investments and cash balances denominated in foreign currencies are translated at the rates in effect at year end. The resulting gain or loss from changes in these rates is included in unrealized investment income.

### (d) ACCRUED PENSION BENEFITS

Accrued pension benefits and changes therein during the year are based on an actuarial valuation prepared by a firm of independent actuaries. The valuation is made as at the start of the year and then extrapolated to year end. It uses the projected benefit method prorated on service and management's best estimate of future economic events (see note 5).

### (e) CONTRIBUTIONS AND BENEFITS

Contributions are recorded on the accrual basis except for special payments from the Province which are recorded in the year in which they are received (see note 7).

Benefits are recorded on the accrual basis.

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## 2. INVESTMENTS

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The investment objectives of the Plan are to minimize the likelihood of an increase in contribution rates and to protect the pension benefits of the Plan members. The strategy employed to achieve these objectives is to invest cash flow from contributions, maturing Debentures and investment returns into a diversified pool of Canadian and foreign assets such as equities, money market securities, government bonds and real estate.

The Plan has \$19.4 billion (1995 — \$18.8 billion) in non-marketable Debentures which must be held to maturity. The Debentures have interest rates and a maturity profile that exposes the Plan to significant fluctuations in fair value. To manage this and other exposures in a manner consistent with its investment objectives, the Plan uses: interest rate, foreign currency and equity futures and forwards; interest rate and equity swaps, options and forward rate agreements (collectively called derivative contracts); and securities purchased under agreements to resell, securities sold under agreements to repurchase and securities sold but not yet purchased. These derivative contracts and other investments allow the Plan to retain the non-marketable Debentures while achieving its objectives of asset diversification and reducing interest rate risk. Through derivative contracts, the investment returns from the Debentures are exchanged for returns equivalent to those which would be earned by investing directly in money market and equity securities, as described in note 2b.

The Plan also takes on positions such as writing or selling options, futures, forwards and swaps in anticipation of movements in the market. The intention of this activity is to enhance investment returns.

# NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

## (a) INVESTMENTS BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS AND INVESTMENT-RELATED RECEIVABLES AND LIABILITIES

The schedule below summarizes the fair value and the cost of the Plan's investments including net accrued interest and dividends of \$348 million (1995 — \$383 million), before giving effect to derivative contracts and investment-related receivables and liabilities as at December 31:

(\$ Millions)	1996		1995	
	Fair Value	Cost	Fair Value	Cost
<b>Fixed income</b>				
Debentures <sup>(1)</sup>	\$19,372	\$14,752	\$18,831	\$14,869
Money market securities	2,187	2,179	2,931	2,916
Bonds				
Canadian	2,389	2,234	1,946	1,846
Foreign	336	324	66	66
Mortgages	110	109	97	97
	<b>24,394</b>	<b>19,598</b>	<b>23,871</b>	<b>19,794</b>
<b>Equities</b>				
Canadian	17,216	12,662	11,382	9,629
United States	662	539	178	174
Non-North American	4,439	3,322	3,312	2,518
	<b>22,317</b>	<b>16,523</b>	<b>14,872</b>	<b>12,321</b>
<b>Real estate</b>	<b>1,272</b>	<b>1,387</b>	<b>1,195</b>	<b>1,272</b>
	<b>47,983</b>	<b>37,508</b>	<b>39,938</b>	<b>33,387</b>
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	1,019	1,019	—	—
Receivables from derivative contracts (note 2b)	592	53	403	55
<b>INVESTMENTS</b>	<b>49,594</b>	<b>38,580</b>	<b>40,341</b>	<b>33,442</b>
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase (note 3)	(432)	(432)	—	—
Securities sold but not yet purchased (note 3)	(817)	(790)	—	—
Real estate indebtedness (note 3)	(274)	(274)	(270)	(270)
Accrued liabilities for derivative contracts (note 2b, 3)	(1,739)	(231)	(1,068)	(202)
<b>Net investments (note 2c)</b>	<b>\$46,332</b>	<b>\$36,853</b>	<b>\$39,003</b>	<b>\$32,970</b>

(1) For details, refer to the Schedule of Province of Ontario Debentures on page 53.

## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

### (b) DERIVATIVE CONTRACTS

Derivatives are financial contracts, the value of which is derived from the value of underlying assets or interest or exchange rates. The Plan utilizes such contracts for asset mix management purposes; for managing the fund's exposure to interest rate and foreign currency volatility; and for trading purposes.

Notional amounts of derivative contracts represent the volume of outstanding transactions and do not represent the potential gain or loss associated with the market risk or credit risk of such transactions. Rather, they serve as the basis upon which the returns from, and the fair value of, the contracts are determined.

Derivative contracts, transacted either in the over-the-counter market directly between two counterparties or on regulated exchange markets, include:

(i) **Swap contracts** Interest rate swaps are contractual obligations in which two counterparties exchange interest rate flows over a period of time based on a notional principal amount. One party typically agrees to pay a fixed interest rate in return for receiving a floating interest rate.

Equity swaps are contractual obligations between two counterparties to exchange cash flows based upon an equity index return. Typically, one party agrees to pay a floating interest rate in return for receiving a return on a specified equity index.

Interest rate and equity swaps enable the Plan to convert a portion of its interest rate exposure to equity exposure thereby providing returns based on the changes in the relevant equity market indices.

(ii) **Futures and forwards contracts** Futures and forwards are contractual obligations either to buy or to sell a specified amount of money market securities, bonds, equity securities or foreign currencies at predetermined future dates and prices.

Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margining. Forwards are customized contracts transacted in the over-the-counter market. As a result of entering into these contracts, returns are generated that are equivalent to the gain or loss that would arise if the securities or foreign currencies had been bought or sold directly at the future price.

These contracts enable the Plan to modify its exposure to the effects of changing interest rates on the Debentures and other interest sensitive investments while retaining the underlying investments. A portion of the foreign currency exposure arising from the Plan's holdings of non-Canadian securities is hedged by currency forwards.

(iii) **Option contracts** Option contracts are agreements in which the right, but not the obligation, is acquired by the option purchaser from the option writer either to buy or sell on or before a specified date, a predetermined amount of a financial instrument at a stated price.

Option contracts permit the Plan, in exchange for money received or paid (the premium), to modify the exposure to changing interest rates, stock prices or foreign exchange rates above or below a predetermined level.



## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

The following table summarizes the Plan's derivative contracts held as at December 31:

(\$ Millions)	1996		1995	
	<i>Notional</i>	<i>Fair Value</i>	<i>Notional</i>	<i>Fair Value</i>
<b>Asset Conversion</b>				
<b>(Fixed Income to Equity)</b>				
Interest rate swaps	\$9,737	\$(1,318)	\$7,993	\$(1,000)
Equity swaps	9,737	1,332	8,283	1,350
		14		350
<b>Interest Rate Management</b>				
Interest rate swaps	6,435	(172)	2,300	(104)
Futures	2,675	(4)	778	(11)
Forwards	200	(1)	125	—
Options				
Purchased	2,587	—	1,640	1
Written	560	(6)	239	(1)
		(183)		(115)
<b>Foreign Currency Management</b>				
Forwards	12,112	(77)	2,371	19
<b>Trading</b>				
Interest rate swaps	100	(1)	—	—
Futures	245	—	—	—
Forwards	649	1	19	—
Options				
Purchased	405	—	—	—
Written	1,009	(7)	67	(1)
		(7)		(1)
		(253)		253
Less: Net cash collateral received under derivative contracts		(894)		(918)
<b>Net fair value of derivative contracts</b>		<b>\$(1,147)</b>		<b>\$ (665)</b>
<b>Represented by:</b>				
Receivables from derivative contracts		\$ 592		\$ 403
Accrued liabilities for derivative contracts (note 3)		(1,739)		(1,068)
		<b>\$(1,147)</b>		<b>\$ (665)</b>

# NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

The derivative contracts on page 43 mature within one year except for the following which have a weighted average maturity (in years) of:

	1996	1995
<b>Asset conversion</b>		
Interest rate swaps	6.6	12.5
Equity swaps	1.6	2.5
<b>Interest rate management</b>		
Interest rate swaps	2.2	7.4

(c) INVESTMENTS AFTER ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS AND INVESTMENT-RELATED RECEIVABLES AND LIABILITIES

The Plan's investments at fair value, before and after giving effect to the derivative contracts and investment-related receivables and liabilities on the Plan's investments at December 31, are summarized below:

(\$ Millions)	1996		1995	
	At Fair Value (per Note 2a)	Effective Net Investment at Fair Value	At Fair Value (per Note 2a)	Effective Net Investment at Fair Value
<b>Fixed income</b>	\$24,394	\$11,688	\$23,871	\$13,303
<b>Equities</b>				
Canadian	17,216	17,367	11,382	12,218
United States	662	6,186	178	5,198
Non-North American	4,439	9,819	3,312	7,089
	22,317	33,372	14,872	24,505
<b>Real estate</b>	1,272	1,272	1,195	1,195
	47,983	46,332	39,938	39,003
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	1,019	—	—	—
Receivables from derivative contracts	592	—	403	—
<b>INVESTMENTS</b>	49,594		40,341	
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase	(432)	—	—	—
Securities sold but not yet purchased	(817)	—	—	—
Real estate indebtedness	(274)	—	(270)	—
Accrued liabilities for derivative contracts	(1,739)	—	(1,068)	—
<b>Net investments</b>	\$46,332	\$46,332	\$39,003	\$39,003

## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

### (d) INTEREST RATE RISK

Interest rate risk refers to the adverse consequences of interest rate changes on the Plan's cash flows, financial position and income. This risk arises from differences in the timing and amount of cash flows related to the Plan's assets and liabilities.

The value of the Plan's assets is affected by short-term changes in nominal interest rates and equity markets. Pension liabilities are exposed to the long-term expectation of rate of return on the investments as well as expectations of inflation and salary escalation.

The Plan's primary exposure is to a decline in the long-term real rate of return which may result in higher contribution rates required to meet pension obligations. As at December 31, 1996, holding the inflation and salary escalation assumptions constant, a 1% change in the assumed real long-term rates of return would result in a change in the pension liabilities of approximately 14% (1995 — 14%).

To match these liabilities the Plan has established a policy asset mix of approximately 75% equities and 25% fixed income securities. The returns on fixed income securities are sensitive to changes in nominal interest rates while long-term equity returns have historically shown high correlation with changes in inflation and salary escalation.

After giving effect to the derivative contracts and investment-related receivables and liabilities discussed in Note 2b, a 1% increase in nominal interest rates would result in a decline in the value of the fixed income securities of 6.7% (1995 — 3.9%).

### (e) CREDIT RISK

Credit risk is the risk of loss in the event the counterparty to a transaction defaults, or otherwise fails to perform under the terms of a contract.

At December 31, 1996, the Plan's most significant concentration of credit risk was with the Province of Ontario. This concentration relates primarily to the holding of \$19.4 billion of Ontario Debentures, a receivable of \$1.3 billion and future funding requirements of the Plan.

The Plan limits derivative contract credit risk by dealing with counterparties that have a credit rating of A and higher, and by utilizing an internal credit limit monitoring process, as well as through the use of credit mitigation techniques such as master netting arrangements and obtaining collateral where appropriate.

### (f) FOREIGN CURRENCY RISK

Foreign currency exposure arises from the Plan's holdings of foreign currency-denominated equities, equity swaps, bonds and money market securities.

The Plan does, from time to time, hedge some of this exposure based on interest rate spreads between various countries or other economic fundamentals. The Plan also takes trading positions in currencies with the objective of increasing returns. As at December 31, 1996, the Plan's net foreign currency exposure after giving effect to the related hedge was as follows:



## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

(\$ Millions)	1996		1995	
	Gross Exposure	Net Foreign Currency Hedge	Net Exposure	Net Exposure
United States	\$ 5,911	\$3,581	\$2,330	\$ 4,688
Japan	2,512	1,484	1,028	1,117
United Kingdom	1,771	796	975	1,132
Germany	683	310	373	464
Other	4,948	532	4,416	3,195
	<b>\$15,825</b>	<b>\$6,703</b>	<b>\$9,122</b>	<b>\$10,596</b>

**3. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES**

Accounts payable and accrued liabilities are comprised of:

(\$ Millions)	1996	1995
Accrued liabilities for derivative contracts	\$1,739	\$1,068
Securities sold under agreements to repurchase	432	—
Securities sold but not yet purchased	817	—
Payable to brokers	174	384
Real estate indebtedness	274	270
Accounts payable and accrued liabilities	46	38
	<b>\$3,482</b>	<b>\$1,760</b>

**4. RECEIVABLE FROM PROVINCE OF ONTARIO**

The receivable from the Province consists of required matching contributions and interest thereon.

(\$ Millions)	1996	1995
Contributions receivable	\$1,200	\$1,229
Accrued interest	86	79
	<b>\$1,286</b>	<b>\$1,308</b>

The receivable from the Province is comprised of amounts to be received as follows: \$664 million in 1997 and \$622 million in 1998.

## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

### 5. ACCRUED PENSION BENEFITS

#### (a) BENEFITS ACCRUED

Benefits accrued in 1996 include \$129 million (1995 — \$150 million) to provide for the increase in pensions determined as a result of a review of all pensions currently in pay.

#### (b) ACTUARIAL ASSUMPTIONS

The actuarial assumptions used in determining the value of accrued pension benefits reflect management's best estimate of expected long-term economic trends, as follows:

	1996	1995
Asset rate of return	8.25%	8.75%
Salary escalation rate	4.50%	5.00%
Inflation rate	3.50%	4.00%

In 1996 there was a change in the assumed inflation rate from 4.0% to 3.5%. Since the assumed rate of return on assets and the salary escalation rate are influenced by the inflation assumption, these have also been reduced by 0.5% from last year's level.

In addition, there was a change in the assumed retirement rates to reflect Plan changes and emerging experience. The changes in the actuarial assumptions in 1996 resulted in a net increase in the value of accrued pension benefits of \$455 million. In 1995, the changes to the actuarial assumptions, principally in the salary growth and retirement rates, resulted in a net decrease in the value of accrued pension benefits of \$266 million.

#### (c) PLAN CHANGES

The Plan will be amended effective January 1, 1997 to incorporate changes arising out of the arbitration award handed out to the Partners in January 1997. The main changes having a direct impact on the actuarial valuation of the Plan are the provision of an unreduced pension after 35 years of credited service, the lowering of the early retirement reduction before the attainment of the 90 factor and the lowering of the Canada Pension Plan reduction. These changes resulted in an increase to the value of accrued pension benefits of \$258 million.

#### (d) EXPERIENCE GAINS AND LOSSES

Experience gains of \$822 million (1995 — \$1.2 billion) arose from differences between the actuarial assumptions and actual results and relate primarily to favourable experience for salary and inflation rates.

#### (e) ACTUARIAL ASSET VALUE ADJUSTMENT

The actuarial value of net assets available for benefits is determined by reference to long-term market trends consistent with assumptions underlying the valuation of accrued pension benefits. The adjustment represents the difference between the actual and management's best estimate of return on the fund amortized over five years. Using this adjustment, fair value remains the underlying basis for asset valuation, but fluctuations are averaged over a five year period.

The year over year change in the actuarial asset value adjustment is reflected in the Statement of Changes in Surplus (Deficiency).

# NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

## 6. INVESTMENT INCOME

### (a) INVESTMENT INCOME BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS

Investment income, before giving effect to derivative contracts and before allocating the realized and unrealized net gains/losses, for the year ended December 31, is as follows:

(\$ Millions)	1996	1995
<b>Interest income</b>		
Debentures (net of interest incurred on swap contracts)	\$ 882	\$ 917
Money market securities	132	163
Bonds		
Canadian	143	83
Foreign	12	4
Mortgages	7	5
	<u>1,176</u>	<u>1,172</u>
<b>Dividend income</b>		
Canadian equities	303	276
United States equities	1	—
Non-North American equities	135	132
	<u>439</u>	<u>408</u>
<b>Real estate</b>		
(net of interest expense \$28 million; 1995 — \$31 million)	57	56
	<u>1,672</u>	<u>1,636</u>
<b>Net gain on investments<sup>(1)</sup></b>	<u>5,764</u>	<u>4,020</u>
	<u>\$7,436</u>	<u>\$5,656</u>

(1) Includes net unrealized gains of \$3,431 million (1995 — \$2,674 million).

### (b) INVESTMENT INCOME AFTER ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS

Investment income by asset class, after giving effect to the derivative contracts and allocating the realized and unrealized net gains/losses, for the year ended December 31, is as follows:

(\$ Millions)	1996	1995
Fixed income	\$1,490	\$1,741
Canadian equities	3,738	1,544
United States equities <sup>(2)</sup>	1,049	1,533
Non-North American equities <sup>(2)</sup>	1,081	784
Real estate	78	54
Total Plan	<u>\$7,436</u>	<u>\$5,656</u>

(2) This includes realized and unrealized net gains on foreign exchange derivative contracts of \$93 million (1995 — \$248 million).



## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

### (c) INVESTMENT RATES OF RETURN AND RELATED BENCHMARKS

Investment rates of return and related benchmarks by asset class for the year ended December 31, 1996, are as follows:

	<i>Investment Rates of Return</i>	<i>Investment Benchmark Returns</i>
Fixed income	11.8%	13.4%
Canadian active equity	31.5	28.3
Canadian index equity	28.4	28.3
United States equity	23.0	23.4
Non-North American equity	11.2	6.6
Real estate	7.0	5.4
Merchant banking	38.4	30.3
<b>Total Plan</b>	<b>19.0%</b>	<b>18.1%</b>

Investment rates of return have been calculated in accordance with the acceptable methods set forth by the Association for Investment Management and Research and the Pension Investment Association of Canada.

The Plan identifies benchmarks to evaluate the performance of the investment management process. The performance of each portfolio is measured against benchmarks that simulate the results of the markets in which the managers invest.

The Total Plan return is measured against a composite benchmark produced by aggregating returns from each of the portfolio benchmarks, using the asset mix policy weight. The Total Plan benchmark return incorporates the Plan's currency overlay policy.

## 7. FUNDING POLICY

Statutory actuarial valuations are prepared periodically in accordance with the *Teachers' Pension Act* to determine the funding requirements of the Plan. Active members are currently required to contribute 7.3 per cent of the portion of their salaries covered by the Canada Pension Plan and 8.9 per cent of salaries above this level. Aggregate member contributions are matched by the Province and other employers.

The actuarial assumptions and methods used to determine statutory pension liabilities are different than those used to calculate the amounts disclosed in these financial statements. The statutory valuations use a conservative approach and also take into account benefits earned and contributions made after the valuation date.

The initial statutory valuation of the Plan, prepared by William M. Mercer Limited as at January 1, 1990, disclosed an unfunded liability of \$7.8 billion which is the amount by which the Plan's liabilities exceeded the assets. This liability is the responsibility of the Province and is being paid off with interest by a series of special payments over the 40-year period which began January 1, 1990. Subsequent statutory valuations treat the present value of the remaining special payments as an asset. As at January 1, 1996, the present value of these special payments amounted to \$8.4 billion.

The last statutory valuation as at January 1, 1996 disclosed an actuarial gain of \$712 million. Pursuant to the Partnership Agreement between the Ontario Teachers' Federation and the

## NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

Province, the Partners entered into negotiations and ultimately arbitration to decide how to utilize the gain. The gain was applied to improve certain benefits under the Plan which amounted to \$456 million. In addition, the assumed retirement rates were modified to reflect the plan changes and emerging experience, which reduced the gain by a further \$178 million, leaving a gain of \$78 million in the Plan. This gain has been retained in the Plan as a rate stabilization fund to apply against future experience.

### 8. CONTRIBUTIONS

(\$ Millions)	1996	1995
<b>Members</b>		
Current service	\$ 605	\$ 609
Optional credit	5	6
Repayments of refunds	—	2
	<u>610</u>	<u>617</u>
<b>Province of Ontario</b>		
Current service	597	602
Special payments	152	—
Optional credit	3	—
Interest	64	58
	<u>816</u>	<u>660</u>
Other employers	9	9
Transfers from other pension plans	10	19
	<u>\$1,445</u>	<u>\$1,305</u>

### 9. BENEFITS

(\$ Millions)	1996	1995
Retirement pensions	\$1,339	\$1,115
Disability pensions	30	26
Death benefits	73	69
Refunds	18	15
Transfers to other plans	60	36
	<u>\$1,520</u>	<u>\$1,261</u>

# NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1996

## 10. ADMINISTRATIVE EXPENSES

### (a) INVESTMENT EXPENSES

(\$ Millions)	1996	1995
Salaries and benefits	\$15.6	\$11.1
Investment management fees	8.2	7.8
Custodial fees	4.4	3.4
Premises and equipment	4.9	3.1
Professional consulting services	2.6	2.5
Information services	2.2	.9
Communication and travel	1.0	.8
Statutory audit fees	.3	.3
All other	.7	.4
	<b>\$39.9</b>	<b>\$30.3</b>

### (b) CUSTOMER SERVICE EXPENSES

(\$ Millions)	1996	1995
Salaries and benefits	\$17.4	\$14.7
Premises and equipment	5.1	5.9
Professional consulting services	4.1	3.4
Communication and travel	1.6	1.7
Board and committee remuneration	.2	.1
Statutory audit fees	.3	.2
All other	.6	.6
	<b>\$29.3</b>	<b>\$26.6</b>



## (c) EXECUTIVE COMPENSATION

The compensation table represents full disclosure of base salary, annual bonus, long-term incentives and other compensation earned in 1994, 1995 and 1996 by the Chief Executive Officer and the four other most highly compensated executives.

<i>Name and Principal Position</i>	<i>Year</i>	<i>Base Salary</i>	<i>Annual Bonus</i>	<i>Long-term Incentive<sup>(1)</sup></i>	<i>Group term Life Insurance</i>	<i>Other Compensation</i>
Claude Lamoureux <i>President &amp; CEO</i>	1996	\$300,100	\$157,100	\$260,952	\$868	\$ 9,600 <sup>(2)</sup>
	1995	296,656	119,400	476,000	842	34,600
	1994	286,606	130,300	—	813	34,600
Robert Bertram <i>Senior V.P. Investments</i>	1996	\$261,404	\$107,400	\$230,076	\$741	\$ 16,333 <sup>(3)</sup>
	1995	255,928	66,000	428,400	726	33,000
	1994	249,363	80,400	—	707	33,000
Morgan McCague <i>V.P. Core Domestic</i>	1996	\$147,926	\$139,600	\$155,625	\$420	—
	1995	142,070	107,200	—	411	—
	1994	138,179	112,100	—	392	—
Heather Hunter <i>V.P. Active Equities</i>	1996	\$162,580	\$155,000	\$ 93,375	\$470	—
	1995	159,606	85,800	166,600	461	—
	1994	157,026	79,100	—	453	—
Brian Muzyk <i>V.P. Real Estate</i>	1996	\$149,878	\$141,300	\$ 83,415	\$433	—
	1995	149,379	113,300	148,750	424	—
	1994	145,038	119,900	—	411	—

(1) The long-term incentive program is designed to ensure the organization's competitiveness to attract and retain senior professionals. The plan measures the amount total fund performance exceeds a composite benchmark over a four-year period. The benchmark is established from market indices for investment portfolio performance using the fund's annual asset-mix target weights and also includes the costs of investment management.

Total fund performance versus the benchmark is shown in the financial highlights on page 1.

(2) Automobile allowance.

(3) Mortgage assistance for relocation of \$ 8,333. Relocation assistance ceased in February 1996.

Automobile allowance of \$ 8,000 per annum.

## 11. COMPARATIVE FIGURES

Certain comparative figures have been reclassified to conform with the current year's presentation.

# INVESTMENTS GREATER THAN \$20 MILLION

AS AT DECEMBER 31, 1996

## FIXED INCOME

(\$ Millions)				
Type	Maturity Date	Coupon (%)	Fair Value	Cost
Canadian Treasury bills	1997	2.5-5.6	\$1,446	\$1,439
Real return Canada bonds	2021-2026	4.3	956	822
Government of Canada bonds	1998-2027	6.0-11.3	509	517
International bonds	2000-2026	6.5-10.0	336	324
Canada corporate bonds	2001-2026	5.4-9.5	107	105
Term deposits	1997	2.8-6.3	482	481
Commercial paper	1997	3.0-3.1	143	142
Index-linked mortgages	2021-2023	6.8-8.2	110	109
Call loans	1997	3.1	103	103

## PROVINCE OF ONTARIO DEBENTURES

(\$ Millions)			
Maturity Date	Coupon (%)	Fair Value	Cost
1997 to 2000	7.00-7.99	\$ 123	\$ 120
	8.00-8.99	384	357
	9.00-9.99	1,141	1,026
	11.00-11.99	503	421
	12.00-12.99	141	121
	13.00-13.99	169	137
	14.00-14.99	120	107
	16.00-16.99	171	165
		2,752	2,454
2001 to 2005	9.00-9.99	765	646
	10.00-10.99	603	502
	11.00-11.99	695	549
	12.00-12.99	1,672	1,206
	13.00-13.99	1,068	760
	14.00-14.99	508	335
		5,311	3,998
2006 to 2010	10.00-10.99	3,903	2,996
	11.00-11.99	3,061	2,253
	12.00-12.99	596	420
	13.00-13.99	22	15
	15.00-15.99	1,583	945
		9,165	6,629
2011 to 2012	10.00-10.99	148	110
	11.00-11.99	1,530	1,095
		1,678	1,205
Total Debentures Net of Accrued Interest		18,906	14,286
Accrued Interest		466	466
		\$19,372	\$14,752

## INVESTMENTS GREATER THAN \$20 MILLION

AS AT DECEMBER 31, 1996

## CORPORATE SHARES (Millions)

<i>Issuer</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Issuer</i>	<i>Shares</i>	<i>Fair Value \$</i>
BCE Inc.	10.1	661.0	BioChem Pharma Inc.	1.4	93.4
Canadian Imperial Bank of Commerce	9.4	568.4	Transalta Corporation	5.2	90.5
Royal Bank of Canada	11.8	568.1	Moore Corporation Limited	3.2	89.9
Barrick Gold Corporation	13.3	520.1	Westcoast Energy Inc.	3.9	89.4
Toronto-Dominion Bank, The	13.3	469.4	Loewen Group Inc., The	1.7	89.2
Seagram Company Ltd., The	7.7	416.6	Suncor Inc.	1.5	87.7
Canadian Pacific Limited	11.1	401.8	Agrium Inc.	4.7	87.7
Bank of Montreal	8.5	371.8	Cameco Corporation	1.5	84.1
Maple Leaf Foods Inc.	37.9	350.3	United Dominion Industries Limited	2.6	82.9
Alcan Aluminium Limited	7.5	346.0	Canadian Occidental Petroleum Ltd.	3.6	78.7
Bank of Nova Scotia, The	7.2	329.7	Falconbridge Limited	2.7	78.4
Northern Telecom Limited	3.7	311.4	Telelobe Inc.	1.9	76.8
Inco Limited	7.1	299.4	Kinross Gold Corporation	7.7	75.0
Placer Dome Inc.	9.5	286.4	Dofasco Inc.	2.9	74.7
Talisman Energy Inc.	5.2	238.5	IPSCO Inc.	1.9	72.3
Thomson Corporation, The	7.7	232.4	Abitibi-Price Inc.	3.3	72.1
Imasco Limited	6.8	230.0	National Bank of Canada	5.2	72.0
Renaissance Energy Ltd.	4.7	219.9	Power Financial Corporation	1.5	70.9
TransCanada PipeLines Limited	9.0	215.3	Bre-X Minerals Ltd.	3.2	69.8
Bombardier Inc.	8.3	210.7	IPL Energy Inc.	1.7	69.7
Nova Corporation	15.1	182.9	Inmet Mining Corporation	10.4	69.4
Magna International Inc.	2.2	165.7	Fairfax Financial Holdings Limited	0.2	69.2
Alberta Energy Company Ltd.	4.9	159.5	Canadian Tire Corporation Limited	3.0	68.5
Petro-Canada	7.8	150.5	Trimac Limited	4.0	68.1
Potash Corporation of Saskatchewan Inc.	1.3	150.3	Torstar Corporation	2.0	65.2
Noranda Inc.	4.8	148.1	Hudson's Bay Company	2.8	65.2
Laidlaw Inc.	9.2	147.4	Franco-Nevada Mining Corporation Limited	1.0	65.1
Newbridge Networks Corporation	3.7	144.0	Hutchison Whampoa Limited	5.7	61.7
MacMillan Bloedel Limited	7.9	140.9	Chauvco Resources Ltd.	4.3	61.1
Encal Energy Ltd.	31.1	133.6	Telefonica de Espana	1.7	60.9
Anderson Exploration Ltd.	7.5	132.1	Jardine Strategic Holdings Ltd.	11.6	57.7
Telus Corporation	6.6	130.8	Avenor Inc.	2.8	57.6
Gulf Canada Resources Limited	12.8	128.0	Poco Petroleums Ltd.	4.3	56.3
Canadian Natural Resources Limited	3.2	121.1	Le Groupe Vidéotron Ltée	4.9	56.1
Power Corporation of Canada	4.2	116.3	Donohue Inc.	2.3	55.8
Imperial Oil Limited	1.7	111.9	Fletcher Challenge Canada Limited	2.6	55.7
Canadian National Railway Company	2.1	108.4	ABN Amro Holdings	0.6	54.9
Trizec Hahn Corporation	3.5	106.0	Crestar Energy Inc.	1.9	54.4
Co-Steel Inc.	4.2	102.9	Euro-Nevada Mining Corporation	1.3	54.1
Teck Corporation	3.1	99.4			
Rogers Communications Inc.	9.4	95.1			



# INVESTMENTS GREATER THAN \$20 MILLION

AS AT DECEMBER 31, 1996

CORPORATE SHARES (Millions) *cont.*

<i>Issuer</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Issuer</i>	<i>Shares</i>	<i>Fair Value \$</i>
Methanex Corporation	4.3	53.7	Berna Gold Corporation	4.1	33.3
TVX Gold Inc.	5.0	53.6	Singapore Airlines Ltd.	2.7	33.2
Rio Algom Limited	1.7	53.5	Veba AG	0.4	32.8
Cheung Kong (Holding) Ltd.	4.4	53.2	International Forest Products		
Hitachi Ltd.	4.1	52.5	Limited	2.9	31.2
ATS Automation Tooling			Wascana Energy Inc.	2.0	31.0
Systems Inc.	2.4	51.6	MDS Inc.	1.3	30.9
Oy Nokia Ab	0.6	51.4	British Gas plc	5.9	30.9
Bayer AG	0.9	51.2	Stone-Consolidated Corporation	1.6	30.7
Norcen Energy Resources			Banco Popular Espanol SA	0.1	30.7
Limited	1.7	50.5	Westpac Banking		
BC TELECOM Inc.	1.7	49.8	Corporation Ltd.	3.9	30.6
Cominco Ltd.	1.4	49.0	Novo Nordisk AS	0.1	30.4
Toronto 35 Index Participation			CAE Inc.	2.9	30.4
Fund Units	1.5	47.6	Canfor Corporation	2.2	30.3
Goldcorp Inc.	3.9	45.5	Newcourt Credit Group Inc.	0.6	29.8
Cognos Incorporated	1.1	43.9	Philips Electronics N.V.	0.5	29.7
National Australia Bank	2.7	43.1	Semi-Tech Corporation	5.9	29.6
Novartis AG	.03	42.9	Doman Industries Limited	3.1	29.2
Acklands Limited	2.4	42.7	Domtar Inc.	2.5	29.1
Elf Aquitaine	0.3	42.0	Deutsche Bank AG	0.4	28.4
HSBC Group	1.4	42.0	BC Gas Inc.	1.4	28.4
Philip Environmental Inc.	2.1	41.7	Carter Holt Harvey Limited	9.1	28.3
Noranda Forest Inc.	4.5	41.5	Canon Inc.	0.9	28.1
Quebecor Printing Inc.	1.7	41.5	Brambles Industries Limited	1.0	28.0
Hong Kong			Molson Companies		
Telecommunications Ltd.	18.7	41.3	Limited, The	1.3	28.0
Quebecor Inc.	1.8	41.1	Royal PTT Nederland NV	0.5	27.7
Northstar Energy Corporation	2.5	40.4	BCE Mobile Communications		
Brascan Limited	1.3	40.1	Inc.	0.7	27.6
Dominion Textile Inc.	5.7	39.6	Hang Seng Bank Limited	1.6	27.4
Abacan Resource Corporation	3.3	39.3	Barclays PLC	1.2	27.1
Sun Hung Kai Properties Ltd.	2.3	39.2	Linamar Corporation	0.6	26.9
Cara Operations Limited	9.5	39.2	CanWest Global		
Shell Canada Limited	0.7	38.0	Communications Corp.	1.9	26.9
Ranger Oil Limited	2.8	38.0	Sony Corporation	0.3	26.8
George Weston Limited	0.6	37.4	Intertape Polymer Group Inc.	0.8	26.6
Broken Hill Proprietary			Mitel Corporation	3.0	26.5
Company	1.9	37.1	Investors Group Inc.	1.0	26.5
Oshawa Group Limited, The	1.8	37.0	Stampeder Exploration Ltd.	3.5	26.4
Prime Resources Group Inc.	3.8	36.9	Royal Oak Mines Inc.	6.0	26.4
Echo Bay Mines Ltd.	3.9	35.9	Loblaw Companies Limited	1.9	26.3
Nova Scotia Power Inc.	2.4	34.8	Canadian Utilities Limited	0.9	26.1
Cambior Inc.	1.7	34.8	Telekom Malaysia Berhad	2.1	26.0
Greenstone Resources Ltd.	2.1	34.2	International Nederlanden		
Finning Ltd.	1.1	33.4	Groep NV	0.5	26.0

# INVESTMENTS GREATER THAN \$20 MILLION

AS AT DECEMBER 31, 1996

## CORPORATE SHARES (Millions) cont.

<i>Issuer</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Issuer</i>	<i>Shares</i>	<i>Fair Value \$</i>
Mitsubishi Industrial Group	2.4	25.9	Dupont Canada Inc.	0.7	22.5
Generale de Banque SA	0.1	25.7	Banque Nationale de Paris	0.4	22.3
Extendicare Inc.	1.6	25.5	Battle Mountain Canada Ltd.	2.3	22.3
Fuji Photo Film	0.6	25.2	Koninklijke Pakhoed NV	0.5	22.0
Nippon Telegraph & Telephone	.002	25.0	Shell Transport & Trading		
Morrison Petroleum Ltd.	3.0	25.0	Company	0.9	22.0
West Fraser Timber Co. Ltd.	0.6	24.8	Consolidated Electric Power		
Stelco Inc.	3.0	24.8	Asia Ltd.	6.7	21.7
Cinram Ltd.	0.7	24.7	PanCanadian Petroleum		
Pegasus Gold Inc.	2.4	24.7	Limited	0.4	21.6
Matsushita Group	1.1	24.1	Aber Resources Ltd.	1.1	21.0
Malaysia International			B.A.T. Industries plc	1.8	21.0
Shipping Corp.	5.9	23.9	Tarragon Oil and Gas Limited	1.4	20.9
Tomkins plc	3.8	23.7	New World Development		
Westmin Resources Limited	3.6	23.7	Company Ltd.	2.3	20.9
Air Canada	3.8	23.6	Rigel Energy Corporation	1.5	20.8
Svenska Handelsbanken	0.6	23.6	Fiat SpA	5.0	20.7
Southam Inc.	1.2	23.5	Jordan Petroleum Ltd.	2.5	20.4
Royal Plastics Group Limited	0.9	23.4	Edper Group Limited, The	2.6	20.4
Volkswagen AG	.04	23.4	Aur Resources Inc.	2.5	20.2
Precision Drilling Corporation	0.5	23.2	Hillsdown Holdings plc	4.3	20.2
M.I.M. Holdings Ltd.	12.0	23.1	Atco Ltd.	0.8	20.1
Electrolux AB	0.3	22.7	Toray Industries, Inc.	2.4	20.1
Redland plc	2.6	22.6			

## CONVERTIBLE DEBENTURES

<i>Security Name</i>	<i>Par Value</i>	<i>Fair Value</i>
Power Financial Corporation 8.0% Due April 30, 2014	\$85.5	\$145.1
Telecom Telesystem Ltd. 5.44% Due November 18, 2002	21.3	67.2

# INVESTMENTS GREATER THAN \$20 MILLION

AS AT DECEMBER 31, 1996

## REAL ESTATE PORTFOLIO

	<i>Ownership</i>
<b>Regional Shopping Centres</b>	
Bayshore Shopping Centre, Ottawa	33.8%
Fairview Park Mall, Kitchener	75.0%
Georgian Mall, Barrie	75.0%
Hillcrest Mall, Richmond Hill	100.0%
Intercity Shopping Centre, Thunder Bay	50.0%
Markville Shopping Centre, Markham	50.0%
New Sudbury Centre, Sudbury	50.0%
Polo Park Mall, Winnipeg	100.0%
Southland Mall, Regina	100.0%
Chinook Centre, Calgary	50.0%
Richmond Centre, Vancouver	100.0%
<b>Office and Other Properties</b>	
1 Queen Street East and 20 Richmond Street East, Toronto	50.0%
Granville Square, Vancouver	100.0%
The Station, Vancouver	100.0%
Waterfront Centre, Vancouver	100.0%
Industrial Properties, Calgary	100.0%
Granville Square II, Vancouver	50.0%
Toronto-Dominion Centre, Toronto — Participating loan	37.5%

## PRIVATE COMPANIES AND PARTNERSHIPS

Absolute Return Fund, Ltd.  
 Telesystem International Wireless Corporation  
 BC European Capital V  
 Commcorp Financial Services Inc.  
 DLJ Merchant Banking Partners, L.P.  
 Maple Leaf Gardens, Limited  
 Nutreco Holding BV  
 Providence Media Partners, L.P.  
 Sun Media Inc.  
 Continental Cablevision, Inc.  
 Trinity Partnership  
 Cadillac Fairview Corporation



## SEVEN-YEAR REVIEW

(\$ Millions)	1996	1995	1994	1993	1992	1991	1990
<b>CHANGE IN NET ASSETS</b>							
<b>Income</b>							
Investment income	\$ 7,436	\$ 5,656	\$ 528	\$ 5,907	\$ 2,145	\$ 3,843	\$ 1,031
Contributions							
Members	610	615	674	647	655	597	526
Province of Ontario	673	669	704	712	740	663	587
— special payments	152	—	—	—	438	270	187
Repayment of refunds and transfers	10	21	58	42	56	54	33
<b>Total Income</b>	<b>\$ 8,881</b>	<b>\$ 6,961</b>	<b>\$ 1,964</b>	<b>\$ 7,308</b>	<b>\$ 4,034</b>	<b>\$ 5,427</b>	<b>\$ 2,364</b>
<b>Expenditures</b>							
Benefits paid	1,520	1,261	1,130	1,001	921	829	760
Administrative expenses	69	57	51	44	37	25	20
Distribution of gain	—	—	—	325	—	—	—
<b>Total Expenditures</b>	<b>\$ 1,589</b>	<b>\$ 1,318</b>	<b>\$ 1,181</b>	<b>\$ 1,370</b>	<b>\$ 958</b>	<b>\$ 854</b>	<b>\$ 780</b>
<b>INCREASE IN NET ASSETS</b>	<b>\$ 7,292</b>	<b>\$ 5,643</b>	<b>\$ 783</b>	<b>\$ 5,938</b>	<b>\$ 3,076</b>	<b>\$ 4,573</b>	<b>\$ 1,584</b>
<b>NET ASSETS</b>							
Investments							
Fixed income	\$11,688	\$13,573	\$12,062	\$18,117	\$19,464	\$19,215	\$18,129
Equities — Canadian	17,367	12,218	9,943	7,510	3,217	2,618	520
— Foreign	16,005	12,287	10,714	7,035	3,253	1,796	807
— Real Estate	1,272	925	694	608	451	180	—
	<b>\$46,332</b>	<b>\$39,003</b>	<b>\$33,413</b>	<b>\$33,270</b>	<b>\$26,385</b>	<b>\$23,809</b>	<b>\$19,456</b>
Receivable from							
Province of Ontario	\$ 1,286	\$ 1,308	\$ 1,338	\$ 1,362	\$ 1,323	\$ 1,190	\$ 945
Other assets	3,293	1,586	622	36	72	10	—
<b>Total Assets</b>	<b>\$50,911</b>	<b>\$41,897</b>	<b>\$35,373</b>	<b>\$34,668</b>	<b>\$27,780</b>	<b>\$25,009</b>	<b>\$20,401</b>
Liabilities	\$ (3,482)	\$ (1,760)	\$ (879)	\$ (957)	\$ (7)	\$ (312)	\$ (277)
<b>Net Assets</b>	<b>\$47,429</b>	<b>\$40,137</b>	<b>\$34,494</b>	<b>\$33,711</b>	<b>\$27,773</b>	<b>\$24,697</b>	<b>\$20,124</b>
Actuarial smoothing	(4,416)	(1,907)	(252)	(2,947)	(414)	(883)	709
Actuarial value of net assets	43,013	38,230	34,242	30,764	27,359	23,814	20,833
Accrued pension benefits	41,833	38,744	36,848	33,998	30,781	27,479	24,391
<b>Surplus (Deficiency)</b>	<b>\$ 1,180</b>	<b>\$ (514)</b>	<b>\$ (2,606)</b>	<b>\$ (3,234)</b>	<b>\$ (3,422)</b>	<b>\$ (3,665)</b>	<b>\$ (3,558)</b>
<b>PERFORMANCE (%)</b>							
Rate of return	19.0	16.9	1.7	21.7	8.9	19.6	5.6
After inflation	16.8	15.2	1.5	20.0	6.8	15.8	0.6
Benchmark	18.1	17.2	(0.3)	20.5	8.0	15.4	—
After inflation	15.9	15.5	(0.5)	18.8	5.9	11.6	—

## BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

### BOARD OF DIRECTORS\*

C. Edward Medland, *Chair*  
Jalynn H. Bennett  
Gail Cook-Bennett  
Geoffrey W. Clarkson  
Ann Finlayson  
Lucy G. Greene  
Martin R. Hicks  
Robert W. Korthals  
David J. Lennox

### INVESTMENTS COMMITTEE

Robert W. Korthals, *Chair*  
Jalynn H. Bennett  
Gail Cook-Bennett  
Geoffrey W. Clarkson  
Ann Finlayson  
Lucy G. Greene  
Martin R. Hicks  
David J. Lennox  
C. Edward Medland  
Gary Porter

### AUDIT AND FINANCIAL COMMITTEE

Jalynn H. Bennett, *Chair*  
Gail Cook-Bennett  
Geoffrey W. Clarkson  
Ann Finlayson  
Martin R. Hicks

### BENEFITS ADJUDICATION COMMITTEE (APPEALS)

David J. Lennox, *Chair*  
Geoffrey W. Clarkson, *Vice Chair*  
Bob Blackwood  
David Eaton  
Sherry Corden Fairweather  
Wendy Gauthier  
Sherron Hibbitt  
Shannon Hogan  
David Paton  
Roger Régimbal  
George Saranchuk  
Elizabeth Stein

*President and Chief Executive Officer:*  
Claude Lamoureux

#### **Investments:**

*Senior Vice-President,* Robert Bertram

#### **Equities:**

*Vice-President,* Heather Hunter

#### **Real Estate:**

*Vice-President,* Brian Muzyk

#### **Core Domestic:**

*Vice-President,* Morgan McCague

#### **Core International and Fixed Income:**

*Vice-President,* Neil Petroff

#### **Research and Economics:**

*Vice-President,* Leo de Bever

#### **Customer and Information Services:**

*Vice-President,* Al Reesor

#### **Data Resources and Administrative Services:**

*Vice-President,* Carole Piper-Peel

#### **Human Resources and Public Affairs:**

*Vice-President,* John Brennan

#### **Finance:**

*Vice-President,* Andrew Jones

#### **Law:**

*General Counsel,* Roger Barton

#### **Internal Audit:**

*Vice-President,* Peter Maher

*We welcome your comments and suggestions for this annual report, as well as other aspects of our communications program. Please call Lee Fullerton, Communications Manager at 416-730-5347.*

Communications Department  
Ontario Teachers' Pension Plan Board  
5650 Yonge Street  
North York, Ontario M2M 4H5  
Toll-free: 1-800-668-0105  
Local: 416-226-2700

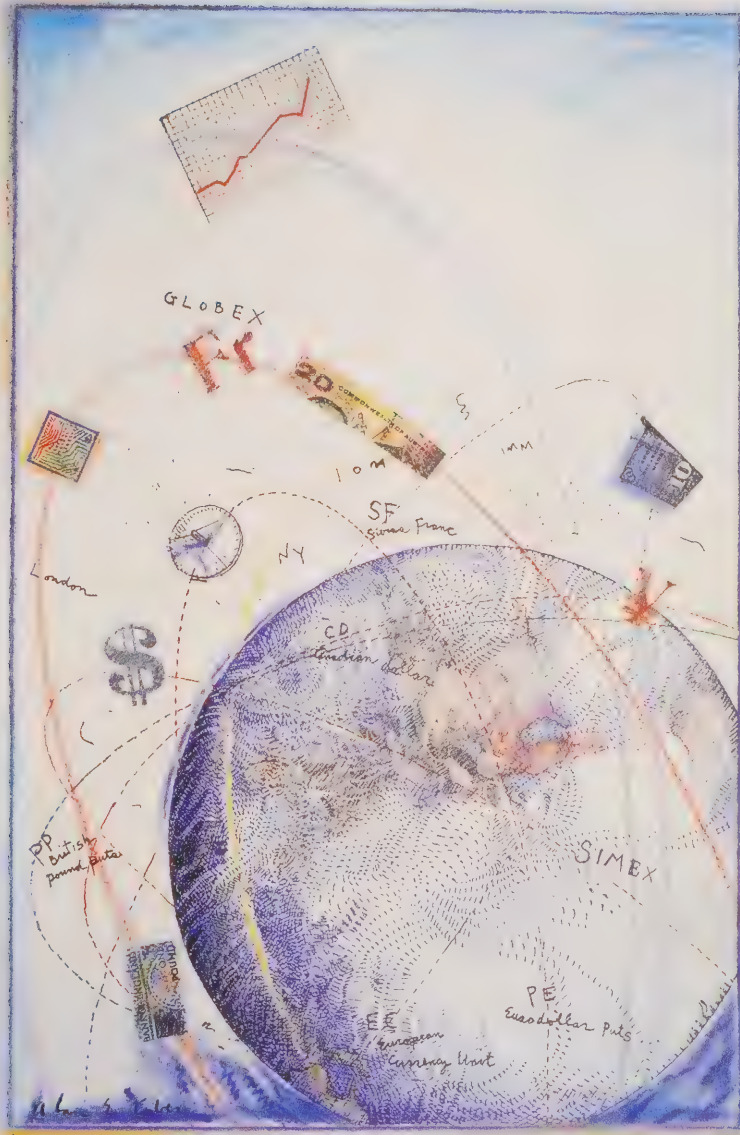




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Teachers'  
Pension Plan  
Board



ANNUAL REPORT 1997

The Ontario Teachers' Pension Plan Board is responsible for the future retirement income of approximately 155,000 elementary and secondary school teachers, 57,000 retired teachers and their survivors, and 90,000 former teachers with entitlements in the plan. The plan is sponsored by a partnership between the Ontario government and the plan members, represented by the Ontario Teachers' Federation.

As the end of 1997, actuarially adjusted net assets exceeded the cost of future pensions, resulting in a surplus of \$4.4 billion.

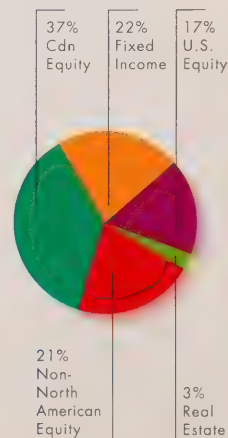
Approximately three-quarters of the plan's investment assets are equities, principally shares in public companies and equity-return derivative contracts. The equity portfolio also includes income-producing real estate properties and shares in private companies. The remaining investment assets are fixed-income securities, largely federal and Ontario government bonds.

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### ASSET MIX

as at December 31, 1997



# FINANCIAL HIGHLIGHTS

As at December 31

## INVESTMENT PERFORMANCE

Rate of return on investments (%)	1997	1996
Annual	15.6%	19.0%
Composite benchmark	15.6	18.1
Real return, after inflation	14.9	16.8
Four-year average	13.1	14.6
Four-year benchmark	12.4	13.5
Four-year real return, after inflation	11.9	13.1

## Average annual compound rates of return (%)

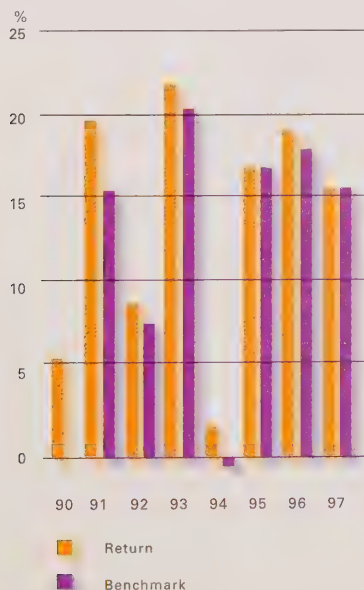
	1 yr	2 yr	3 yr	4 yr	5 yr	8 yr
Our return	15.6	17.3	17.1	13.1	14.8	13.4
Benchmark	15.6	16.8	17.0	12.4	13.9	10.4

## SURPLUS

(\$ Billions)	1997	1996
Net investments	\$52.9	\$46.3
Other assets and liabilities	0.3	(0.2)
Contributions receivable	1.3	1.3
Net assets	54.5	47.4
Smoothing reserve*	5.6	4.4
Actuarially adjusted net assets	48.9	43.0
Cost of future pensions	44.5	41.8
Surplus	\$ 4.4	\$ 1.2

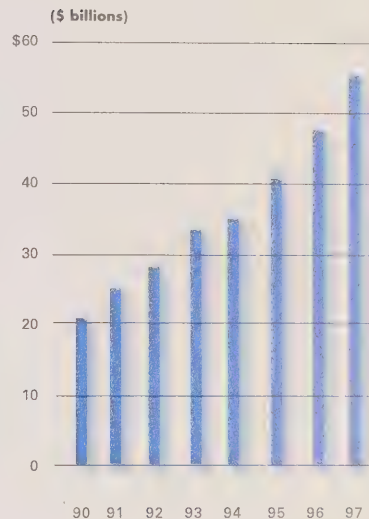
\*We smooth gains (or losses) over five years to reduce the impact of market volatility on plan surplus. The smoothing reserve consists of investment gains in excess of the actuarial assumptions used in the best estimate valuation.

## RATE OF RETURN



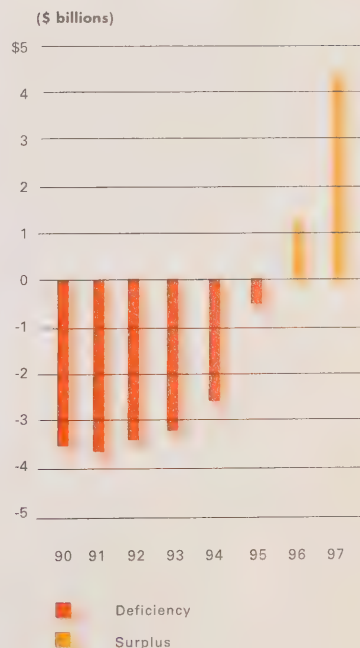
## NET ASSETS

as at December 31



## SURPLUS

as at December 31





The pension plan  
is in good  
financial health.



## BOARD OF DIRECTORS

*From left (front) to right.*

### **C. Edward Medland**

Former Chief Executive Officer of  
Wood Gundy Inc. *Chair of the Board*

### **David J. Lennox**

Secretary of the Ontario Public School  
Teachers' Federation, former school  
principal. *Chair of the Benefits  
Adjudication Committee*

### **Gary Porter**

Chartered accountant and founding  
partner of the accounting firm, Porter  
Hétu International, and a past president  
of the Certified General Accountants  
Association of Ontario

### **Jalynn H. Bennett**

President of Jalynn H. Bennett &  
Associates Ltd., a consulting firm  
specializing in strategic planning and  
organizational development. *Chair of  
the Audit and Actuarial Committee*

### **Robert W. Korthals**

Former President of the Toronto-  
Dominion Bank. *Chair of the Investment  
Committee*

### **Roger D. Wilson**

Partner with the law firm Fasken  
Campbell Godfrey in Toronto

### **Geoffrey W. Clarkson**

Chartered accountant and former senior  
partner with Ernst & Young

### **Lucy G. Greene**

Former Vice-President of Human  
Resources with Sun Life Assurance  
Company of Canada and President,  
Greene Thomas & Associates

### **Ann Finlayson (absent)**

Journalist, speaker, freelance editor and  
consultant, she has written three books  
including, *Whose Money is it Anyway?*  
*The Showdown on Pensions* (1988)

## CHAIR'S REPORT

The pension board's success during the past eight years is due to the different roles played by the partners (the Province of Ontario and the Ontario Teachers' Federation), the Board of Directors and the management team.

When the pension board became the manager of the pension plan on January 1, 1990, there was a 15 percent gap between the pensions promised to teachers and the plan's ability to pay them over the long term. The gap arose in part because contributions were inadequate for the benefits promised and the investment policy was conservative, with assets restricted to Province of Ontario non-marketable debentures.

The provincial government launched the pension board with the mandate to invest actively and close the gap. The pension board responded by diversifying the asset mix into Canadian and foreign stocks, merchant banking securities and real estate investments. The result today, helped by favourable stock markets for most of the past eight years, is the second consecutive year of surplus. This will help to secure future pensions and puts the plan in a financially robust position.

### THE ROLE OF THE PARTNERS

The partners are involved in three key areas. One is to appoint the directors, who govern the pension board. A second is to determine plan design, specifically the levels of benefits. The third is to mutually decide on the use of any gain in the plan, which is determined by a valuation every three years by an independent actuary.

Each partner appoints four members to the Board of Directors for a maximum of four consecutive two-year terms, and both partners jointly appoint the chair. With the exception of myself, board membership has changed completely during the past eight years with 17 individuals having served as directors. Ten, including two corporate lawyers, were selected by the partners because of their financial, investment and business experience. The remaining seven directors have a variety of backgrounds in education, teachers' unions, pension benefits consulting and journalism.

The current directors are listed on page 2. At the end of 1997, Gail Cook-Bennett stepped down after eight years as a director and Martin Hicks after seven years as a director and a further year as a member of the Board's investment committee. The knowledge and wise counsel of both will be greatly missed. Joining the Board in 1998 are Roger Wilson, Q.C., a partner in a Toronto law firm and a director of several prominent companies, and Gary Porter, a chartered accountant and former investment and trust manager who has served on the Board's investment committee since 1990.

**The surplus**

**will help**

**to secure**

**future**

**pensions.**

## THE ROLE OF THE DIRECTORS

Directors are required to act as trustees in accordance with the rules of the pension plan, governing legislation and common law. They represent the best interests of beneficiaries in ensuring that the pension promise is properly financed and the pension plan is properly managed.

The directors spend most of their time dealing with investment issues, such as reviewing the overall investment policy, asset mix, and performance of investment portfolios, as well as approving large individual investments. They also review the administration of plan benefits and services to members on a regular basis.

## THE ROLE OF MANAGEMENT

The primary role of management is to maximize investment returns without taking undue risks and to administer pension services to members in an efficient, cost-effective and accurate manner. The directors have established a compensation program for senior management that is designed to attract and retain outstanding individuals. We annually review the performance of the chief executive officer and his senior staff against external benchmarks and annual objectives.

## A NON-POLITICAL ROLE

Ensuring that plan members receive their full pension entitlements is the sole reason why the pension board exists. Consequently, it is governed and managed in a non-political manner. Its activities are shaped by legislative and trustee requirements, as well as the ethical standards expected of professionals.

The relationships among and different roles of the partners, directors and management have worked very well over the past eight years and have allowed the organization to evolve effectively in serving the best retirement interests of Ontario's teachers. On behalf of the directors, I wish to thank the partners and the management team for their commitment in enabling the pension board to make the future pensions of each present and future beneficiary more secure.



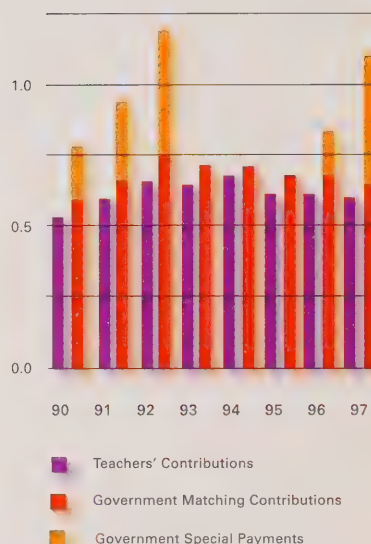
C. EDWARD MEDLAND

CHAIR

### CONTRIBUTIONS

(\$ billions)

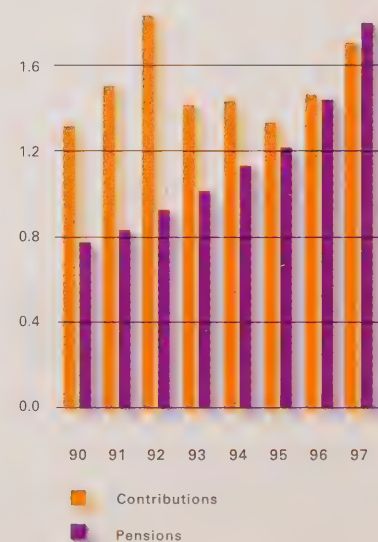
\$1.5



### CONTRIBUTIONS VS PENSIONS

(\$ billions)

\$2.0





Despite volatile stock markets in the latter half of the year, the growth in the plan's assets outpaced the growth in the cost of future pensions in 1997 to increase the surplus first achieved in 1996. As a result, the plan is in a stronger financial position to provide the retirement income promised to members. We also made solid progress in reviewing and verifying member information so that we can ensure better service to members.

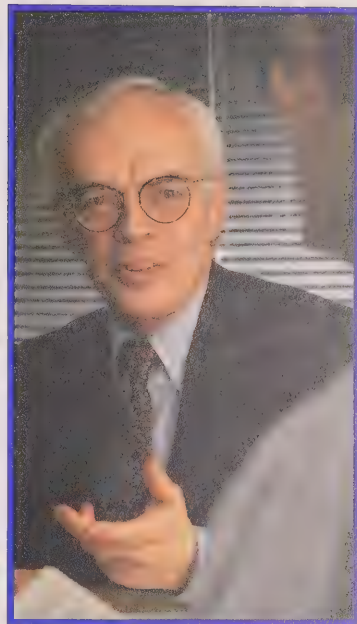
### CHANGES IN THE COST OF FUTURE PENSIONS

The value of all promised pensions has risen from \$24.4 billion at the end of 1990 to \$44.5 billion at the end of 1997. In 1997 alone, accrued pensions increased by \$2.7 billion. The growth in these costs is largely a result of the plan's maturation with an aging member population and more teachers retiring each year.

### CALCULATING THE SURPLUS

Our first priority is to make sure that the plan has sufficient funds to cover the \$44.5 billion in promised pensions. The plan's assets are primarily stocks and bonds, which can fluctuate widely in value within a short period of time. For example, the plan's investments declined briefly by \$1.5 billion in the last week of October when global markets reacted to currency crises in southeast Asia. That weekly loss exceeded the 1996 surplus of \$1.2 billion. On an annual basis, our investment income has varied from \$528 million in 1994 to \$7.4 billion in 1996.

Like many pension funds, we spread the annual change in net assets (in excess of the actuarial assumptions) over five years to level out short-term swings in values. Smoothing provides a clearer picture of the match between assets and future obligations. The plan concluded 1997 with net assets totalling \$54.5 billion, a \$7.1 billion increase over 1996. The smoothing reserve increased to \$5.6 billion from \$4.4 billion in 1996. The smoothing reserve is deducted from net assets to produce actuarially adjusted net assets of \$48.9 billion (as shown on page 1). The cost of future pensions is deducted from this amount, leaving a surplus of \$4.4 billion in 1997.



*Claude Lamoureux  
President and Chief Executive Officer*

A market  
downturn  
could erase  
as much as  
\$10 billion  
from asset  
values in  
one year.



Investment  
income  
totalled  
\$14.6 billion  
over the last  
two years.

## FINANCIAL POSITION

The pension plan is in good financial health with a combined smoothing reserve and surplus of \$10 billion above the estimated cost of all future pensions. But how much surplus do we really need? History is replete with major market corrections. It is possible that a market downturn could erase as much as \$10 billion from asset values in one year and it could take several years to recover that loss. The cost of future pensions can also increase or decrease substantially with large changes in interest rates.

As no one is able to forecast market performance with certainty, it is prudent for a pension plan to have a surplus in good times to avoid having too little money to meet obligations that extend over several decades. We are currently conducting studies to determine an appropriate surplus level for a pension plan with our size and maturity of liabilities.

## DETERMINING ANY GAIN

The smoothing reserve and surplus provide a year-end snapshot of the plan's financial condition. Ontario's *Pension Benefits Act* requires a more conservative valuation at least every three years to determine the impact of gains and losses on benefits and reserves. In making this valuation, an independent actuary recommends whether contribution rates should be changed. The next funding valuation is scheduled for January 1, 1999 and the partners will subsequently decide on the use of any gain.

## INVESTMENT PERFORMANCE

Approximately 75 percent of the plan's investments are equities, primarily Canadian and foreign corporate shares, derivative contracts and income-producing real estate. The remaining 25 percent are fixed-income securities, largely government bonds and derivative contracts.

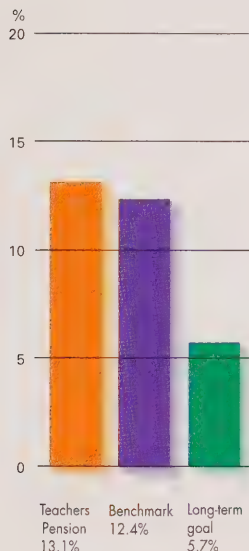
The pension plan earned a 15.6 percent rate of return in 1997, matching the performance of the markets in which it invests. Investment income totalled \$7.2 billion, compared with \$7.4 billion in 1996.

The timing of two investment policy decisions reduced total fund performance last year. Our foreign exchange trading anticipated that the Canadian dollar

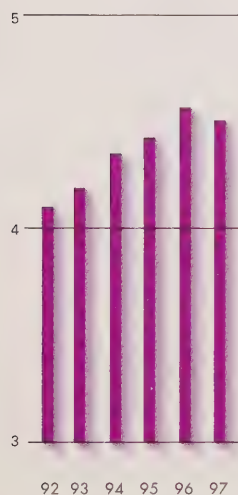
Annual benefit payments  
rose to \$1.8 billion.

#### 4-YEAR PERFORMANCE COMPARISON

as at December 31, 1997



#### QUALITY SERVICE INDEX



The yearly average of  
client satisfaction on a  
scale of 1 to 5

would appreciate relative to the U.S. dollar, when in fact it declined. We also expected the Canadian stock market to outperform the U.S. market and adjusted the asset mix accordingly. While these decisions had not added the value expected by year end, most portfolios performed well, in some cases beating their market benchmarks by healthy margins as shown in the table on page 22.

On a four-year basis, we earned a 13.1 percent average rate of return. After allowing for inflation, the real rate of return was 11.9 percent, compared with the plan's long-term real rate target of 4.5 percent. We must caution, however, that the plan's exceptional performance in recent years is based on the longest stock market rally in history and is not sustainable over the long term.

We compare the total fund performance against a composite benchmark that tracks the performance of the markets in which we invest. To the extent we beat the benchmark, we add extra wealth to the plan. Over the past four years, the fund's 13.1 percent average compound rate of return compared with 12.4 percent for the composite benchmark. For full details on our investment policies and performance, please see the section entitled Management's Discussion & Analysis.

#### CLIENT SERVICE

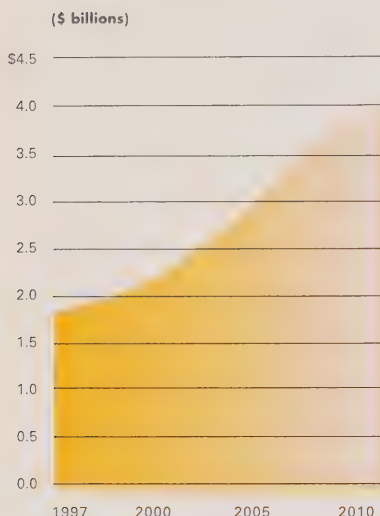
The pension board provides centralized pension services directly to 212,000 active and retired teachers and receives approximately 100,000 telephone calls annually on entitlement matters. Our ongoing priority is to respond to the needs of teachers about to retire as well as those already on pension.

The biggest impediment to providing active teachers with prompt service is the accuracy and completeness of their historical contribution and service information. To ensure we have accurate and up-to-date information when a member calls, we have been requesting more frequent data reporting by school boards and independent schools. This project has been slowed somewhat by the recent amalgamation of school boards and may take several years to complete.

The demand for client services, particularly requests for pension estimates, termination statements and other entitlement information, continues to escalate. Improvements to pension benefits last year, such as reduced early retirement penalties, and rumours of early retirement changes encouraged more teachers to contact the pension board. Our workload also increased following a change in the method of calculating entitlements, based on the



## PROJECTED PENSIONS



We expect

benefits

paid out

annually

to reach

\$4 billion

in

12 years.

actual number of days that each teacher works in a year, rather than an assumed teaching year of 200 working days.

Last year, 4,650 teachers started on pension, expanding the pensioner population to 57,000 and annual benefit payments to \$1.8 billion. We expect the high level of retirements in the past two years to continue with benefits paid out annually reaching \$4 billion in 12 years.

## SPECIAL PROJECTS

As discussed in previous years, we discovered that information for teachers who retired many years ago was often wrong or incomplete. In 1997, we completed the final phase of the review of 58,779 individual pensions. As a result, about 43 percent of pensioners have received lump-sum payments and monthly pension increases.

The total present and future cost of adjusting pensions is about \$350 million. As we have noted before, the original errors in calculating entitlements were not large. However, when inflation was factored in, and interest was added, payouts were substantial in a few hundred cases.

In conducting the pension review program, possible errors were also uncovered in the entitlements of deceased pensioners with no survivors. The board concluded that it had a duty to make an effort to contact the legal representatives of these estates. A communications initiative was launched in 1997 and approximately 3,000 requests for entitlement review were received. These will be recalculated in 1998.

Another special project is to search for approximately 90,000 former teachers who were contributors at one time and have entitlements in the plan. Most are entitled to refunds of contributions rather than pensions.

## CHANGES IN OPERATING COSTS

The pension board's operating costs rose by 31 percent to \$90.5 million in 1997, compared with \$69.2 million a year earlier.

Costs relating to ongoing client services were \$20.9 million, compared with \$20.6 million in 1996, despite increased transaction volumes. The cost of special projects, including the conclusion of the pension review program and

**Investment costs  
were 11 cents for each  
\$100 of assets.**

#### CLIENT SERVICE EXPENSES

(\$ Millions)	1997	1996
Salaries and benefits	\$12.6	\$12.4
Special projects	10.5	8.7
Premises and equipment	4.0	3.9
Professional consulting services	1.9	2.1
Communication and travel	1.4	1.5
Board and committee remuneration	0.2	0.2
All other	0.8	0.5
	<b>\$31.4</b>	<b>\$29.3</b>

#### INVESTMENT EXPENSES

(\$ Millions)	1997	1996
Salaries and benefits	\$22.0	\$15.6
Investment management fees	16.0	8.2
Custodial and banking fees	5.8	4.4
Premises and equipment	6.4	4.9
Professional consulting services	3.0	2.6
Information services	2.5	2.2
Communication and travel	1.8	1.0
All other	1.6	1.0
	<b>\$59.1</b>	<b>\$39.9</b>

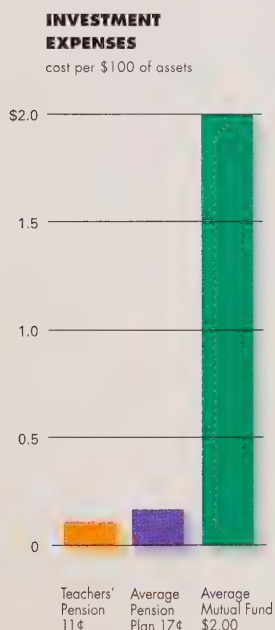
the redesign of computer systems to improve pension administration, was \$10.5 million in 1997, compared with \$8.7 million in 1996.

Costs associated with investments were \$59.1 million, compared with \$39.9 million in 1996. Higher transaction volumes and asset values increased fees paid to external fund managers as well as salaries and benefits for existing and new staff. Costs for staff specialists such as investment managers, analysts, technology specialists and investment accountants, were 37 percent of total investment expenditures. The balance was the cost of outside managers, custodians and other services.

Our 1997 investment costs were approximately 11 cents for each \$100 of assets, compared with 8.6 cents in 1996. These costs are reasonable compared with similar investment organizations. For example, the 1996 average cost of investment services among comparable North American pension funds was close to 17 cents per \$100 of assets.

#### ACKNOWLEDGEMENTS

We remain dedicated to managing the fund in a prudent manner to maximize investment income for members and to modernizing the management and delivery of pension benefits so that members receive accurate, prompt and complete service when they need it. To do this, we depend on 450 employees and I thank each one of them for their contribution.



*C. Lamoureux*

CLAUDE LAMOUREUX PRESIDENT AND CHIEF EXECUTIVE OFFICER

## STATEMENT OF CORPORATE GOVERNANCE PRACTICES

The Toronto and Montreal stock exchanges require listed companies to disclose their system of corporate governance as a condition of continued listing on the exchanges. In our view, effective corporate governance helps to ensure that a company's resources are devoted primarily to enhancing long-term value. We have chosen to comply with the disclosure requirements because:

- we believe we should measure our own behavior by the standards we expect of others; and
- we provide pension services to approximately 300,000 individual customers who have the right to know how their pension plan is governed and managed.

Of the 14 TSE guidelines, all but one apply to the pension plan. The exception recommends that a board committee nominate new directors. In our case, this is done under the partners' agreement by the plan's co-sponsors. We comply generally or specifically with the remaining 13 guidelines.

### MANDATE OF THE PENSION PLAN CORPORATION

The Ontario Teachers' Pension Plan Board is an independent corporation (without share capital) established on January 1, 1990 by the *Teachers' Pension Act*. This Ontario statute requires the corporation to administer the pension plan, manage its investment assets, and pay members and their survivors the benefits promised. Specifically, the *Teachers' Pension Act* states: "The Board shall administer the pension plan and manage the pension fund in accordance with this Act, the *Pension Benefits Act* (Ontario), and the *Income Tax Act* (Canada)."

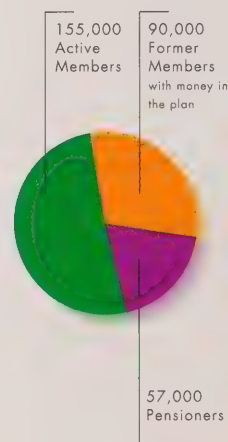
The plan is a defined benefit pension plan registered under the *Pension Benefits Act* and the *Income Tax Act*. It is comprised of a base plan and a supplemental plan (see page 27 and note 11 to the financial statements). The *Pension Benefits Act* defines the fiduciary duties of all pension plan administrators in Ontario and obliges them to administer the plan and invest assets with the same prudence expected of a person dealing with another's property. The standards of conduct expected of a fiduciary are also set out in common law.

The *Teachers' Pension Act* provides for the joint sponsorship of the pension plan by two partners, the Ontario government, through the Minister of Education and Training, and the executive of the Ontario Teachers' Federation (OTF), as the representative of plan members.

An agreement signed by the partners effective January 1, 1992 sets out the terms of joint sponsorship. The partners are equally responsible for plan losses and gains. A six-member partners' committee is responsible for changes in plan design and benefit levels. The agreement deals with the appointment of the board of directors and delineates the board's powers and duties other than those set out in legislation. The members of the partners' committee are not

### MEMBER PROFILE

as at December 31, 1997





**The board of directors  
is required to act in the  
best interests of all  
beneficiaries.**

**Ensuring  
that plan  
members  
receive their  
full pension  
entitlements  
is the sole  
reason why  
the pension  
board exists.**

members of the board of directors. The partners have also appointed the board as trustee of the supplementary plan.

## **COMPOSITION OF BOARD OF DIRECTORS**

By law, the board of directors is required to act independently of the sponsoring partners and to make decisions in the best interests of all beneficiaries — that is, the active teachers, former teachers and retired teachers who are plan members as well as the survivors of deceased members. In this respect, the role of the directors is similar to that of any corporation; they are required to act in the best interests of the corporation and its shareholders generally, and not in the interests of any specific group of shareholders.

Each partner appoints four directors and together the partners name the chair as the ninth director. Ted Medland, former chief executive of Wood Gundy Inc., has served as chair since the beginning of 1996.

The partners select directors based on the relevance of their expertise and experience to the mandate of the corporation. No member of management is a director. Of the two partners, only the OTF has a direct representative on the board — the secretary of one of the five affiliates of OTF who is also a member of OTF's board of governors.

## **BOARD COMMITTEES**

There are four board committees:

- *The investment committee*, which reviews the investment policy and asset mix, approves annual performance objectives for the investment portfolios, and approves all transactions that exceed the discretionary limits set for management. This committee includes all directors.
- *The audit and actuarial committee*, which reviews the annual financial statements, recommends the appointment of the external auditors and the independent actuary, and receives their reports. It also receives the reports of the internal auditor. The committee consists of five directors.
- *The benefits adjudication committee*, which rules on disputes between plan members and board staff about pension benefits. This committee includes two board members as well as nine non-board members nominated by the partners and appointed by the board. Disputes are heard by panels comprised of the two board members and four other committee members.
- *The human resources and compensation committee*, which approves the salary ranges, annual performance bonuses and long-term performance bonuses for employees. It also reviews succession planning and key employee development. This committee consists of the full board.

**In 1997,  
the board  
and the  
investment  
committee  
met  
12 times.**

The board does not have a corporate governance committee. Governance issues are dealt with by the full board in the normal course of business.

### **EFFECTIVENESS OF BOARD**

An orientation program is in place for new directors to assist them in executing their fiduciary and governance duties. All directors attend special seminars on specific technical issues, such as the actuarial valuation of liabilities and the use of derivative contracts. Education is provided by outside experts as well as staff specialists.

The fact that each director is appointed for a term of two years, and can only serve four consecutive terms, ensures that the partners consider the qualifications and effectiveness of individual directors on a continuing basis.

In 1997, the board and the investment committee met 12 times, the audit and actuarial committee six times, and the compensation committee four times. The benefits adjudication committee held two appeal hearings and met twice during the year.

### **INDEPENDENCE OF BOARD**

The structure of the board, and the process for appointing directors, ensures that the board of directors is able to operate independently of management.

To ensure access to external sources of important information, the directors meet from time to time with outside advisers on general topics, as well as with external investment managers and experts in compensation. Furthermore, the audit and actuarial committee consults directly with the internal and external auditors and the independent actuary and reviews the auditors' findings on the effectiveness of internal controls.

Individual directors can engage an outside adviser, with the approval of the chair, at the organization's expense in appropriate circumstances.

### **ROLE OF MANAGEMENT**

Ongoing plan administration and investment management is delegated by the board of directors to the chief executive officer and his staff. The staff manages two core businesses — client services and investment services — each supported by general corporate services. This is one of few Canadian pension organizations that provides pension services directly to its members rather than through their employers.

**A partners' committee  
is responsible for changes  
in plan design and  
benefit levels.**

**The Ontario  
Teachers'  
Pension Plan  
Board is an  
independent  
corporation.**

## MANAGEMENT PERFORMANCE

To ensure the interests of management and plan beneficiaries are closely aligned, senior staff receive annual and long-term bonuses based on the achievement of preset performance targets approved by the directors. The board requires management to set annual corporate objectives as well as longer-term business strategies. The objectives are accompanied by an annual financial plan for fund investment and plan administration.

The strategy for investments is expressed in the *Statement of Investment Policy and Goals*, which the board reviews annually. This document sets out, for example, the long-term asset mix policy as well as the need for the fund to achieve investment returns that exceed the rate of inflation by 4.5 percent.

The board also regularly reviews the strategies for active management of assets. Portfolio managers are rewarded annually for achieving four-year performance targets. In the case of pension plan administration, executives are required to meet annual and four-year performance targets for improvements in the quality of services delivered to members as measured by regular surveys of member opinions, and the effectiveness of managing operating costs.

Every year, the board receives an actuarial valuation of the plan's financial viability and an audited financial statement. The directors also annually review the investment and non-investment risks faced by the organization, and the adequacy of procedures to deal with those risks. In addition, the balance sheet and performance of the investment portfolios is reviewed every quarter.

## ACCOUNTABILITY AND COMMUNICATIONS

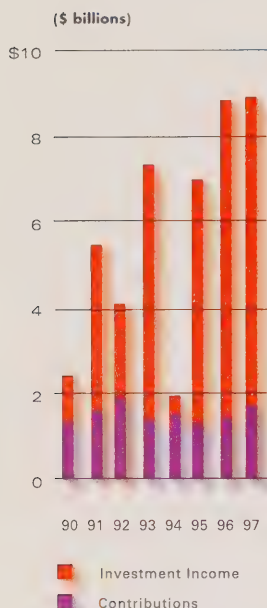
The board has made accountability to the partners and disclosure of activities to plan members the cornerstone of its communication policy. This policy acknowledges that plan beneficiaries have a right to know how their contributions are spent and invested.

As noted, this annual report complies with the disclosure requirements for public companies, which are more onerous than those imposed on pension funds. We maintain direct contact with plan beneficiaries — our “shareholders” and clients — through newsletters and annual statements, focus groups, quality-of-service surveys, presentations to teachers approaching retirement, management presentations to teacher organizations, meetings with the pension representatives of teachers' unions and the association representing pensioners, and daily telephone discussions and correspondence. We are accountable to members dissatisfied with staff decisions through the benefits adjudication appeal process.



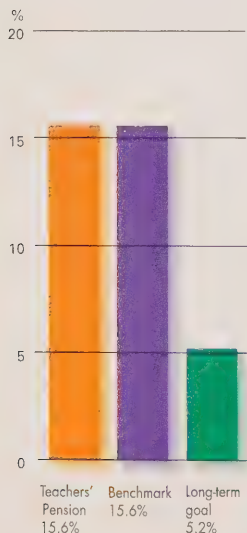
## MANAGEMENT'S DISCUSSION AND ANALYSIS

### INCOME



### 1997 PERFORMANCE COMPARISON

as at December 31, 1997



This section of the Annual Report elaborates on the information contained in the audited financial statements to assist readers in viewing the plan's financial position and performance through the eyes of management.

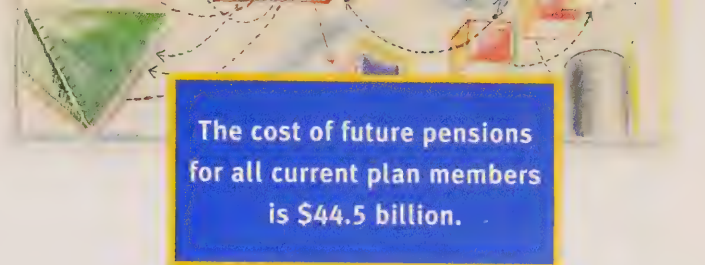
### PENSION PLAN OBJECTIVES

The plan is required to deliver defined benefits to Ontario's teachers during their retirement years. To meet these obligations, and based on the current contribution rates of members and the Province of Ontario, the plan needs to earn an annual rate of return of 4.5 percent above inflation over the long term. In practice, the plan's assets are managed to earn a high rate of return at moderate risk and to achieve a surplus of assets over liabilities. This should minimize the risk of a contribution increase. A surplus provides a cushion against a severe decline in asset values or a sharp increase in liabilities as the result of volatile markets. Since implementing an active investment policy in 1990, the plan first achieved a surplus in 1996.

**Contribution rates** Adding value substantially above the 4.5 percent real rate of return should make it possible to reduce contributions over the long term. Ontario teachers currently contribute to the plan 7.3 percent of the first \$36,900 of salary and 8.9 percent on remaining salary. The Ontario government and designated private schools and organizations match these contributions. Every three years, the independent actuary retained by the pension board determines the level of contributions appropriate to fully fund the benefits promised to members. Three reviews have been completed since 1990 and contribution rates have remained unchanged. The next review is scheduled following the funding valuation as at January 1, 1999.

### YEAR-END FINANCIAL POSITION

The plan's accrued pension benefits increased from \$41.8 billion to \$44.5 billion during 1997. The actuarial assumptions used to determine these costs reflect management's best estimate of expected long-term trends in investment returns, teachers' salaries, inflation and demographic factors. The main assumptions are set out on page 26.



The cost of future pensions  
for all current plan members  
is \$44.5 billion.

#### CHANGES IN NET ASSETS

(\$ Millions)	1997	1996
<b>Income</b>		
Investment income	\$7,246	\$7,436
Contributions	1,696	1,445
	8,942	8,881
<b>Expenditures</b>		
Benefits	1,802	1,520
Operating expenses		
Client services	31	29
Investments	59	40
	1,892	1,589
<b>Increase in net assets</b>	<b>\$7,050</b>	<b>\$7,292</b>

#### ACCRUED PENSION BENEFITS

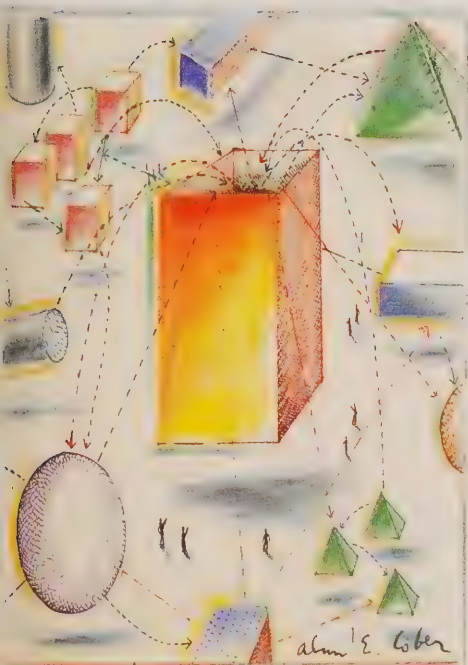
(\$ Billions)	1997	1996
Accrued pension benefits, beginning of year	\$41.8	\$38.7
Interest on accrued pension benefits	3.4	3.4
Benefits earned	1.2	1.3
Benefits paid	(1.8)	(1.5)
	44.6	41.9
Changes in actuarial assumptions	0.7	0.5
Plan changes	—	0.2
Experience gains	(0.8)	(0.8)
Accrued pension benefits, end of year	\$44.5	\$41.8

**Benefit payments** In 1997, the plan paid \$1.8 billion in benefits, an increase of almost \$300 million over the previous year. The increase principally reflected 4,650 teachers starting on pension, bringing to more than 57,000 the number of pensioners and their survivors receiving benefits. This included \$1.7 billion in pension payments and an additional \$108 million in commuted value transfers. The 1997 payments also reflected a 1.6 percent cost-of-living adjustment. The plan requires an averaging method for calculating the inflation adjustment rate, which differs from the year-over-year rate of inflation. The inflation adjustment for January 1998 was 1.9 percent.

**Review program** The 1997 payments included \$113 million in lump-sum payments to make up for deficiencies in pensions dating back more than 20 years. The deficiencies were recognized under the pension entitlement review program. The plan paid out a total of \$78 million under the program in 1995 and 1996. As a result of the review program, and in addition to the lump-sum payments, the cost of future pension benefits has increased by \$150 million.

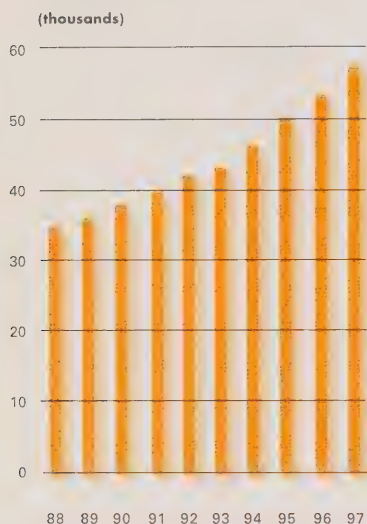
**Change in net assets** The plan began 1997 with \$47.4 billion in net assets available for benefits. As the accompanying table shows, income totalled \$8.9 billion during the year — \$7.2 billion from investments, compared with \$7.4 billion in 1996, and \$1.7 billion from contributions by teachers and the Ontario government, compared with \$1.5 billion a year earlier.

As noted, benefits paid to members totalled \$1.8 billion. The costs of managing investments and administering the plan at \$90.5 million were small relative to the asset base. (Operating costs are discussed in the President's Report on page 8.)



## NUMBER OF PENSIONERS

as at December 31



As a result of these changes, net assets available for benefits grew by \$7.1 billion to \$54.5 billion at the 1997 year end.

**Surplus** The plan had a surplus of \$4.4 billion as at December 31, 1997, compared with \$1.2 billion a year earlier. Before calculating the surplus, gains (or losses) in net assets in excess of the actuarial assumptions are amortized over five years to smooth out the impact of one-year changes in values. The smoothing is intended to provide a more realistic relationship between assets and future liabilities. Before smoothing, the surplus of net assets over the cost of future pensions was \$10 billion.

## MATCHING ASSETS AND LIABILITIES

To ensure financial viability, we determine the asset mix appropriate for the size and structure of the plan's liabilities.

**Liabilities** Pension benefits, which will be paid out over several decades, are affected by many long-term economic, investment and demographic factors and trends. While not a recent issue, inflation is one of our most important long-term concerns. Teachers' pensions are indexed to the Consumer Price Index, and inflation, of course, influences interest rates. Consequently, the value of liabilities is sensitive to interest rates, increasing when rates go down and decreasing when rates go up. If we were able to invest only in bonds that earn real rates of return (that is, adjusted for inflation), we could virtually eliminate surplus risk, but the returns would be low and contributions would need to be higher. (In fact, less than four percent of our assets produce real rate returns because there is an insufficient supply of this investment product.) If we focused only on earning the highest rates of return, results would be volatile and the risk of having to raise contribution rates in any given year would be greater, although average contributions might be lower.

Our goal is to select an asset mix that balances risks and rewards and avoids volatility in contribution rates.

## ASSET-MIX POLICY



**Asset mix** Our asset-mix policy of 75 percent equities and 25 percent fixed-income securities has a high probability of ensuring that the assets grow at



**We actively manage  
much of the fund to create  
extra value.**

**Our goal  
is to select  
an asset mix  
that avoids  
volatility in  
contribution  
rates.**

least as fast as the liabilities over the long term. Assets are diversified among various asset classes and across the world's economic regions to reduce investment volatility.

The asset-mix policy is reviewed annually by management and the Board of Directors and changes are made as necessary. The asset mix is crucial to long-term performance because more than 80 percent of the total investment returns depend on the assets selected.

**Matching** Both assets and pension liabilities are sensitive to interest rates. One way to measure this is a concept called duration. Research indicates a one percent change in interest rates is expected to produce a 15 percent change in the value of equities. This translates into a duration of 15 years for equities. When fixed-income investments are combined with equities, total assets have an average duration of 13 years. A one percent change in interest rates normally affects our pension liabilities by 16 percent, for a 16-year duration. The better matching of assets to liabilities reduces, though it does not eliminate, the risk that a drop in real return interest rates would increase liabilities more than assets.

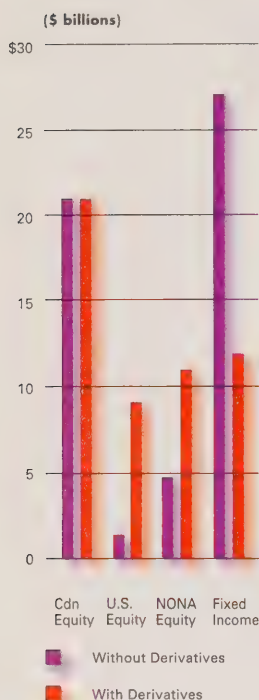
**Adding value** Growth in the plan's assets will increasingly come from investments now that pension payments exceed total contributions. Consequently, we actively manage as much of the fund as possible to create extra value. Staff and external managers select investments that are expected to outperform market benchmarks by 50 basis points (or half-of-one percent) net of expenses.

We also attempt to enhance performance by macro-managing the total fund through "overlay" programs. For example, the asset-mix policy allows equities to vary between 65 and 85 percent of total assets. This provides flexibility in tilting the weighting between fixed income and equity. We set asset-mix ratios on a country-by-country basis, which can be increased or decreased within preset ranges to take advantage of opportunities.

Another overlay program hedges the fund's exposure to foreign currencies. To reduce the volatility of returns, our policy is to hedge 50 percent of our investments denominated in the Japanese yen, U.S. dollar, British pound, German mark, Swiss franc and French franc. We can add value by shifting from our policy weighting.

## EFFECT OF DERIVATIVES

as at December 31, 1997



**Benchmarks** We track our performance in adding value against market benchmarks for each investment portfolio. The amount by which we exceed market averages shows the value that our active management adds to each portfolio. The major benchmarks are shown below:

### MEASURING OUR PERFORMANCE

<i>Investment</i>	<i>Benchmark</i>
Canadian equity	TSE 300
U.S. equity	S&P 500
Non-North American equity	EAFE index
Real estate	Frank Russell Canada Property Index
Bonds	Scotia Capital Market Universe Bond Index

Total fund return is measured against a composite benchmark that aggregates the returns for each portfolio benchmark, using our asset-mix policy weights. The composite benchmark is higher than the median rate of return for large Canadian pension funds due to our asset-mix policy of 75 percent equities, compared with less than 60 percent equities for most funds. As noted earlier, our asset-mix policy responds to the real-rate nature of our liabilities.

### INVESTMENT MANDATE

Our investment policy is expressed in a document entitled *Statement of Investment Policies and Goals*, which is reviewed annually by the Board of Directors and filed with the Pension Commission of Ontario.

Legislation requires us to “exercise the care, diligence and skill in the administration and investment of the pension fund that a person of ordinary prudence would exercise in dealing with the property of another” (subsection 22 (1) *Pension Benefits Act, Ontario*). Under the “prudent person” rule, we are expected to consider every type of investment product that would be appropriate for a modern investment portfolio. However, the investment staff’s authority to invest in any particular product is set out in the *Statement of Investment Policies and Goals*.

**Investment choices** We invest in stock indices, individual company shares, derivative contracts, income-producing real estate, Ontario debentures, government and corporate bonds, real-rate investments and money-market

### INVESTMENTS BY PORTFOLIO

(\$ Billions)	1997	1996
Fixed income	\$12.3	\$12.0
Canadian active equity	2.5	2.7
Canadian index equity	15.5	13.8
U.S. equity	8.6	6.0
Non-North American equity	10.7	9.6
Real estate	1.6	1.2
Merchant banking	1.7	1.0
	\$52.9	\$46.3

**We use derivatives  
to reduce risk.**

**Our  
composite  
benchmark is  
higher than  
the median  
rate of return  
for large  
Canadian  
pension  
funds.**

securities. In 1997, 86 percent of assets were in Canada although we generated 40 percent of returns from outside the country through the use of derivatives and cash investments.

We are adding further value by developing quantitative equity portfolios, a venture capital fund, large-block equity investing, and high-yield debt and corporate bond portfolios. These initiatives are currently small relative to the total fund.

**Use of derivatives** We use derivative contracts, such as swaps, futures, forwards and options, to manage interest rate volatility and foreign currency exposure as well as to improve overall returns.

In the early 1990s, when the plan's assets were almost exclusively non-marketable Ontario debentures, we primarily utilized derivatives to shift the asset mix from fixed-income returns to equity returns. At year end, we had exchanged fixed-rate interest on \$10.9 billion of debentures for equity returns using interest-rate swaps and equity swaps. These positions are summarized in note 2b to the financial statements. We do not assume additional market risk by using equity swaps compared with making direct cash investments in equities.

Derivatives provide flexibility in implementing our investment strategy. For example, it is quicker and less expensive to acquire a return on a market index, such as the Standard & Poor's 500 on the New York Stock Exchange or the FTSE 100 index on the London Stock Exchange, utilizing equity swaps than by purchasing stocks of the individual companies included in the index.

As part of our internal risk management, all derivatives are marked to market daily and are supported by appropriate underlying assets. The effects of derivatives are included in the value of the various asset classes.

## **EQUITY INVESTMENTS**

Equities totalled \$40.6 billion at the end of 1997, compared with \$34.6 billion a year earlier. The charts on pages 20 and 22 show the composition of the equity portfolio and the rates of return for each asset class compared with its benchmarks. Approximately \$11.8 billion, or 29 percent, of equity exposure is in the form of equity swaps, compared with \$9.7 billion, or 28 percent, in 1996.



## EQUITY PORTFOLIO

as at December 31, 1997

(\$ billions)



**Stock index portfolios** In 1997, we had \$30.1 billion invested in Canadian and foreign stock index portfolios. These portfolios are expected to match the performance of the index less transaction costs. As the largest index portfolio manager in Canada, we take care in our buy and sell decisions not to disrupt the market or signal our intended actions. This is done through block trading for large transactions in particular stocks, and through basket trading for groups of different stocks in a single transaction.

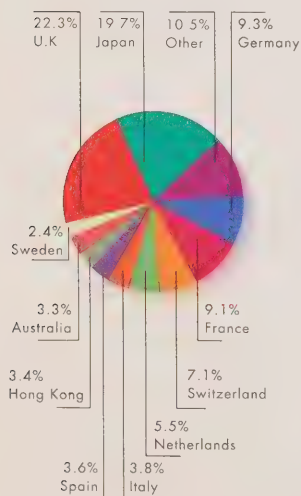
We manage \$15.5 billion in Canadian index portfolios that contain the shares of corporations listed in the TSE 300 index on The Toronto Stock Exchange. These index funds represent 3 percent of the outstanding float of the TSE 300 index. To improve returns above the market benchmark, we have developed quantitative portfolios that invest in TSE 300 stocks based on models that attempt to identify strategies and stocks that should outperform the index.

Our foreign stock index funds totalled \$14.6 billion at the end of 1997. Approximately 95 percent of these investments were derivative contracts and 5 percent equity securities funded with cash. The derivative investments are primarily implemented by our staff specialists who generally exchange the fixed-interest income from Ontario debentures for floating rate interest and then exchange these floating cash flows for equity returns in the United States and overseas. At the 1997 year end, we had exchanged \$5.1 billion of fixed-rate interest for returns on U.S. equities in the Standard & Poor's 500 index and \$6.7 billion for returns on equity indices in Europe, Australia and the Far East. These investments were worth \$7.6 billion and \$6.4 billion respectively at year end.

Non-North American equity swaps were contracted in nine countries. Japan is our largest commitment, followed by the United Kingdom and other European stock market indices.

## NON-NORTH AMERICAN EQUITIES

as at December 31, 1997



**Actively managed stock portfolios** We actively manage a \$2.5 billion portfolio of Canadian stocks and \$4.7 billion of foreign stocks. The Canadian portfolio is primarily managed internally while foreign stocks are selected by external fund managers familiar with U.S., European and Asian companies.

The search for value is the most important principle behind our managed investment approach. We select the shares of companies that are considered

**Our Merchant Banking portfolio had an 31% rate of return over the last four years.**

**In 1997,  
we had  
\$30.1 billion  
invested in  
Canadian  
and foreign  
stock index  
portfolios.**

to be undervalued. We analyze each company's financial performance, operations, industry position, management quality, long-term business plan, board structure and board independence. The best investment opportunities often occur when the outlook for a particular industry or company is negative. Conversely, the best divestment opportunities often occur when optimism is pervasive.

Our Canadian stock portfolio includes investments managed by an external fund manager who identifies undervalued companies where shareholder value can be improved through the participation of an experienced investor owning a large block of shares. The manager votes the shares on our behalf.

Our foreign stock portfolio was overweighted in Europe last year and underweighted in Japan, where the market turned in negative returns. The emerging markets of Asia, Latin America, and Central and Eastern Europe represent less than one percent of total investments.

**Merchant banking** We manage a \$1.7 billion merchant banking portfolio that is one of the largest in Canada. In 1997, we invested \$500 million in 10 new merchant banking opportunities. We apply corporate, financial and strategic skills to these investments in the expectation of portfolio returns at least 2 percent higher than the TSE 300 index. We also invest on a pooled basis with other merchant banks, brokerage houses, and managed funds in Canada, the United States, Europe and Asia.

A new initiative in 1997 was the allocation of \$100 million to be invested over three years in small early-stage enterprises in Canada. By year end, \$50 million had been committed in this venture capital portfolio.

**Real estate** We own \$2 billion in Canadian real estate consisting of regional shopping centres, downtown office buildings, industrial properties and 17 percent interest in Cadillac Fairview Corp. The \$1.6 billion portfolio reflects \$371 million in mortgages as shown in note 2c. The property portfolio is detailed on page 55. Our only real estate transaction last year was the purchase of the remaining 50 percent interest in four shopping centres we had jointly owned with a property company.

Faced with limited acquisition prospects at home, we intend to pursue real estate opportunities outside Canada. We have committed US\$100 million to

**RATE OF RETURN COMPARED TO BENCHMARK**

	1997	Benchmark
Fixed income	11.4%	11.5%
Canadian equity	15.6	15.0
U.S. equity	37.3	39.2
Non-North American equity	5.1	5.1
Real estate	22.2	12.6
Merchant banking	52.9	17.0
Overall	15.6%	15.6%

**4-YEAR AVERAGE RATE OF RETURN COMPARED TO BENCHMARK**

	4-year average	Benchmark
Overall	13.1%	12.4%

a fund seeking acquisitions in Asia where property values have declined dramatically, presenting timely investment opportunities.

**Commodities** Late in 1997, we initiated a US\$100 million commodities program that is invested through derivatives in the Goldman Sachs Commodity Index. Commodities are an attractive asset class in that they diversify the risk of the total fund assets. They also appreciate in value with higher inflation rates, acting as a hedge against an increase in the plan's liabilities.

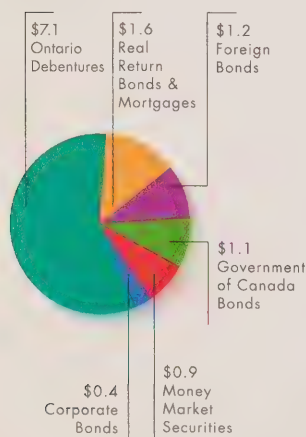
**FIXED-INCOME INVESTMENTS**

Fixed-income securities totalled \$12.3 billion at the end of 1997, compared with \$12 billion a year earlier. The composition of the fixed-income portfolio is shown in the chart on this page.

**FIXED INCOME**

as at December 31, 1997

(\$ billions)



**Debenture portfolio** The largest component of the fixed-income portfolio is \$7.1 billion of non-marketable Ontario debentures, after the effect of derivatives. The debentures are managed to behave as much as possible like our liabilities in response to changes in interest rates. Because the duration of our assets is shorter than those of the liabilities, we changed our debenture policy in mid-1996 to extend duration from 4 to 7.5 years. This action improved 1997 returns by approximately \$375 million. We have changed the benchmark for debentures to reflect this important policy change.

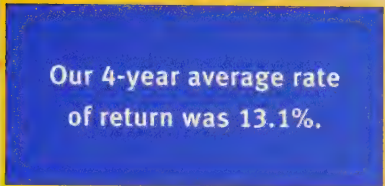
The debentures before the effect of derivatives are detailed on page 51.

**Bond portfolio** The \$2.7 billion marketable bond portfolio consists of Government of Canada bonds, global bonds, and corporate bonds. We also have \$0.9 billion in money-market securities.

We trade bonds in anticipation of changes in interest rates, and manage the bond portfolio relative to the market benchmark. The corporate bond portfolio was expanded to include convertible bonds and high-yield unsecured notes.

Bond markets in Europe, the United States and Canada showed strong growth in 1997 with long-term yields approaching historic lows in an environment of low interest rates, low inflation and buoyant economic growth.





Our 4-year average rate  
of return was 13.1%.



The real  
rate of  
return,  
after  
inflation,  
was 14.9  
percent.

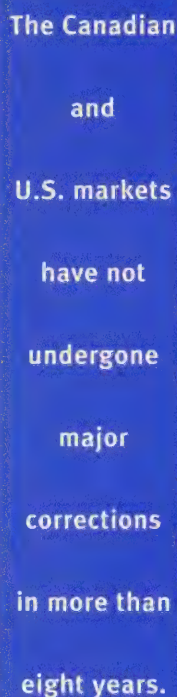
**Real-rate investments** The value of our holdings of real-rate Canada bonds grew by \$470 million in 1997 to \$1.4 billion. These securities have an average real rate of return of 4.9 percent. We also own \$197 million of index-linked mortgages. Real-rate investments are a perfect match with our liabilities. Most of our holdings are completely risk-free with respect to inflation and are guaranteed by the federal government.

## INVESTMENT PERFORMANCE

Net investments increased to \$52.9 billion in 1997, compared with \$46.3 billion at the end of 1996. The increased value primarily reflected strong Canadian, U.S. and European equity markets and good growth in the Canadian bond market.

**1997 performance** The plan registered a 15.6 percent rate of return in 1997, equaling the composite benchmark return of 15.6 percent. After inflation, the return was 14.9 percent, compared with 16.8 percent in 1996. The total plan performance was moderated in 1997 by two timing decisions. Our foreign exchange overlay program anticipated a rise in the Canadian dollar relative to the U.S. dollar, when in fact it declined. We expect an improvement in the Canadian currency during 1998. We also allocated investments above our asset-mix policy in Canada and below policy in the United States in the belief that the Canadian stock market would outperform the U.S. market. In fact, the U.S. market substantially outperformed the Canadian market. These policy decisions reduced the total return by approximately 40 basis points. However, individual investment portfolios performed well, in some cases exceeding benchmarks by healthy margins (see note 6c), bringing up the total return to equal the benchmark.

**Four-year returns** A longer-term measure has greater relevance, greater reliability, and lower volatility than measuring one-year performance. A common standard within the pension plan industry is to calculate average performance on a four-year cycle. Over the past four years, the plan's average annual performance of 13.1 percent exceeded the benchmark rate of return by 0.7 percent. The real rate of return, after inflation, was 11.9 percent, a level of performance that is not sustainable over the long term.



The Canadian  
and  
U.S. markets  
have not  
undergone  
major  
corrections  
in more than  
eight years.

## RISKS AND RISK MANAGEMENT

During 1997 we implemented a "Value at Risk" system to monitor and manage market risk on a daily basis. Active management risk limits are set through formal policies and procedures. We also measure the impact of changes in interest rates and other factors on the plan's financial position by using models to match the risks between assets and liabilities. Among the most important risks are asset/liability matching (discussed earlier), interest rate volatility, stock market volatility, liquidity risk, credit risk, and foreign currency risk.

**Interest rate volatility** Pension liabilities are sensitive to changes in management's expectations of long-term investment returns, rates of inflation and growth in teachers' salaries. Assets are affected by short-term changes in nominal interest rates and equity markets (see note 2d). Declining real rates of return over many years could, for example, put pressure on the contribution rates required to meet pension obligations. Conversely, sustained increases in real rates would have the opposite effect.

**Stock market volatility** Having large stock portfolios exposes the fund to market volatility. However, the long-term performance expectations of domestic and foreign corporate shares outweigh the risks of short-term volatility.

Historically, North American stock markets have experienced a negative return about once in every five years. By the end of 1997, the Canadian and U.S. markets had not undergone major corrections in more than eight years and were highly valued by historical standards.

If a correction occurs, it would be difficult for a large fund to move in and out of the market efficiently, a situation exacerbated by the fact that the shares of many leading Canadian corporations are closely owned. Control blocks of shares represent approximately 21 percent of the market value of TSE 300 shares on The Toronto Stock Exchange, leaving an available capitalization of \$530 billion for investors seeking equity opportunities.

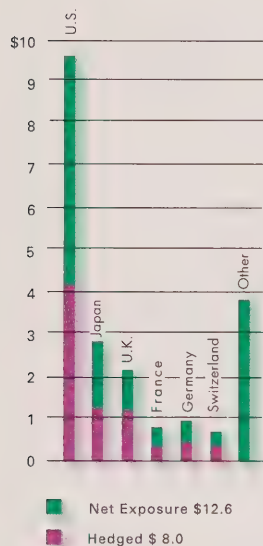
Part of our risk management strategy is to reduce dependence on the Canadian economy by diversifying globally through foreign stock purchases and equity derivative contracts.

**We continuously monitor  
credit risk.**

# **CURRENCY EXPOSURE**

as at December 31, 1997

(\$ billions)



Overall, Canada remains our primary equity market, where we had \$19.4 billion invested in equities in 1997, followed by \$9.1 billion in the United States, \$2.2 billion in Japan and \$2.4 billion in Britain.

**Liquidity risk** After payment of pension benefits and operating costs, the increase in net assets available for benefits totalled \$7.1 billion in 1997. Cash flow came primarily from investment income (dividends, interest income and realized capital gains) and contributions.

The cash needs for pension payments and operating expenses are predictable. On the investment side, our major liquidity risk is associated with our portfolio of equity derivative contracts. These contracts are often long term. To reduce credit risk, gains and losses are exchanged with our counterparties every three to six months. A drop in foreign equity markets which is sustained for more than three months would require us to transfer cash collateral. We periodically assess the fund's ability to withstand the liquidity effects of a catastrophic 25 percent drop in all markets. Because the equity contracts have been profitable, we currently hold a large amount of collateral from counterparties. This cash collateral, along with marketable short-term securities, annual cash flow, and other liquid assets, is more than sufficient to cover the fund's liquidity risk.

**Credit risk** Every time we make an investment we are exposed to credit risk in the event a security counterparty defaults on payments or becomes insolvent. Credit risk exists with security issuers, such as governments and corporations, as well as with such counterparties as financial institutions and investment dealers with whom we have investment contracts.

The largest credit exposure, as discussed in note 2e to the financial statements, is the Province of Ontario, which owes the plan \$19.3 billion in non-marketable debentures and \$1.3 billion in contributions receivable.

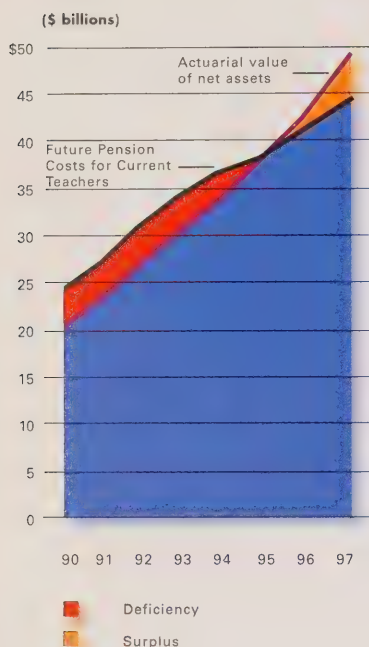
In the case of security issuers and derivative counterparties, we continuously monitor credit risk and, depending on the credit rating, restrict debt and equity investment in a single corporation or financial institution to between one and three percent of total fund assets.

In the case of swap counterparties, we deal only with those parties that have credit ratings of A or higher. Unrealized gains and losses on equity swaps



**SURPLUS**

as at December 31

**FUNDING VALUATION ASSUMPTIONS**

(at January 1)	1996	1993	1990
Rates of return on investment	8.0%	8.0%	8.5%
Salary escalation rates	5.0	5.0*	5.75
Inflation rates	4.0	4.0*	4.5

\*2% for 1993 and 1994

**BEST ESTIMATE VALUATION ASSUMPTIONS**

(at December 31)	1997	1996
Rates of return on investment	7.75%	8.25%
Salary escalation rates	4.0	4.5
Inflation rates	3.0	3.5

are exchanged every three to six months. We exchange cash flows and settle interest rate swaps every six months, reducing the potential impact of a counterparty defaulting on its contractual obligations.

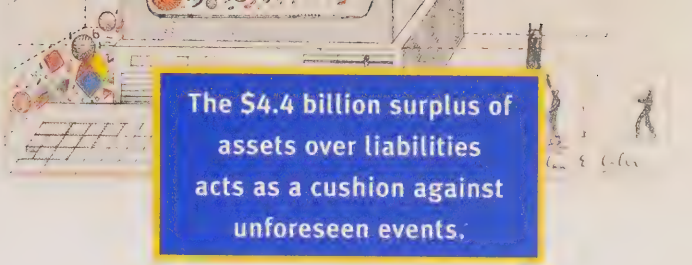
**Foreign exchange risk** When we make foreign investments, changes in the relative value of the Canadian dollar can add to, or subtract from, our returns. Our policy of hedging 50 percent of our equity policy exposure in six currencies reduces the overall volatility of the assets and permits flexibility in managing foreign exchange movements. We had \$8 billion of foreign currency hedges in place at the 1997 year end.

**ACTUARIAL VALUATIONS**

The plan's financial condition is measured by two valuations. One is the best estimate valuation made at the end of each year in preparing our financial statements and it determines the year-end surplus. The other valuation is scheduled to be every three years and determines the contribution rates for plan members and the Ontario government. Both valuations are prepared by the independent actuary. The assumptions used in each valuation and the differences that result are shown in the accompanying charts.

In accordance with the *Pension Benefits Act*, the funding valuations use more conservative actuarial assumptions than the annual best estimate valuations. In addition, they take into consideration future benefits and future contributions, while the best estimate valuations reflect only benefits earned and the value of the assets on the date of the valuation.

The initial funding valuation on January 1, 1990 indicated an unfunded liability of \$7.8 billion, primarily because contributions were insufficient to support promised benefits, particularly after 1976 when pensions were indexed to the Consumer Price Index. During the late 1970s and most of the 1980s, high inflation rates increased the value of benefits at a much faster rate than the increase in the value of assets. The Ontario government agreed in 1990 to pay the initial unfunded liability through a series of payments from 1990 to 2029. To date, it has paid \$1.6 billion. The present value of these future payments, which are treated as an asset in the funding valuations, was \$8.4 billion at the beginning of 1996.



**The \$4.4 billion surplus of assets over liabilities acts as a cushion against unforeseen events.**

#### FUNDING VALUATION RESULTS (\$ BILLIONS)

January 1	1996	1993
Value of assets at valuation date	<b>\$38.3</b>	\$29.4
Present value of future contributions	<b>14.5</b>	14.3
Present value of future special payments from Province	<b>8.4</b>	8.4
Total assets	<b>61.2</b>	52.1
Present value of future benefits	<b>60.5</b>	50.6
Gain	<b>\$ 0.7</b>	\$ 1.5

The second funding valuation on January 1, 1993 estimated an actuarial gain of \$1.5 billion due to favourable investment experience as well as revised assumptions about the future, such as lower salary and inflation rates. Under an agreement between the Ontario government and the Ontario Teachers' Federation, the government took this gain by eliminating \$1.2 billion of the scheduled payments between January 1993 and July 1996 and by reducing its contributions to the plan by \$325 million in 1994 and 1995.

The third funding valuation, effective January 1, 1996, estimated an actuarial gain of \$712 million. In January, 1997, the partners agreed to use most of the gain to improve pension benefits for members.

#### RETIREMENT COMPENSATION ARRANGEMENT

Historically, members contributed based on all their earnings and received a pension based on all their earnings. In 1992, the federal government limited the pension that could be paid from registered pension plans, putting them on a similar basis to other retirement vehicles.

The partners responded in 1992 by creating a supplementary plan, called a retirement compensation arrangement (RCA), so that members could continue to contribute on all their earnings and receive pensions on all their earnings. The RCA tops up any amount not provided by the registered plan.

The RCA is managed in conjunction with the registered plan. However, 50 cents of every dollar contributed to the RCA must be deposited interest-free with the federal government. Consequently, investment growth in the RCA would be at half the rate of the registered plan because the rate of return applies to only half the assets in the RCA. As a result, the partners have decided to fund the RCA on a pay-as-you-go basis and permit unfunded liabilities to accumulate. This decision produced an imbalance between net assets of \$0.7 million and accrued benefits of \$273.2 million as at December 31, 1997. These liabilities represent less than one percent of total plan accrued pension benefits. We expect these liabilities to fluctuate widely reflecting even minor changes in assumptions about economic and demographic trends.

The federal pension limits are frozen until 2005. In the meantime, a larger number of members with higher incomes are likely to retire and will qualify to receive a portion of their entitlements from the RCA. Members

**The Ontario  
government  
has paid  
\$1.6 billion  
in special  
payments  
since 1990.**

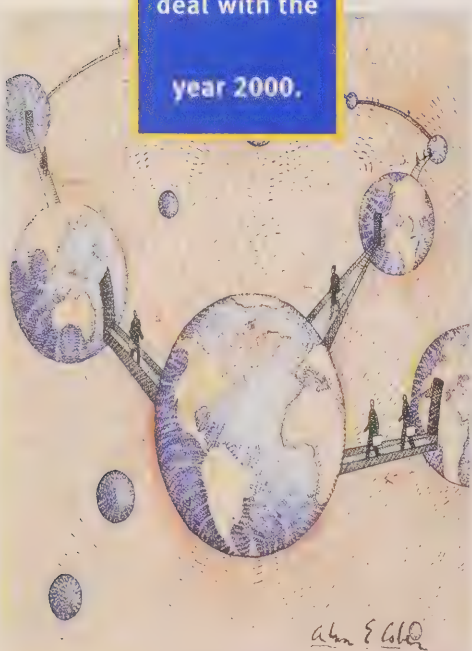
Our  
information  
systems are  
new and  
were  
designed to  
deal with the  
year 2000.

with qualifying credit not allowed by the federal *Income Tax Act* will also benefit from the RCA. The RCA is discussed further in note 11 to the financial statements.

#### YEAR 2000

The pension board has upgraded its internal information systems for plan administration and investments over the last six years. They were designed and programmed to accommodate the year 2000 in all respects. As a final check, we will be completing additional systems testing in 1998.

We are dependent on several external information systems for our pensioner payroll, data collection from school boards and investment transactions, for example. We have been assured that these systems have been reviewed and will be year 2000 compatible.





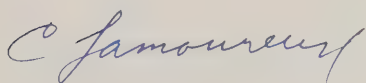
## MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The financial statements of the Ontario Teachers' Pension Plan have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must of necessity be based on estimates and judgements. The accounting policies followed in the preparation of these financial statements conform with generally accepted accounting principles. Financial information presented throughout the annual report is consistent with the financial statements.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded and proper records maintained. These controls include quality standards in hiring and training of employees, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization. Internal controls are reviewed and evaluated by internal audit programs which are subject to scrutiny by the external auditors.

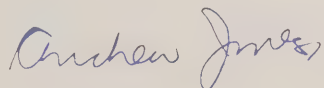
Ultimate responsibility for the financial statements rests with the Board of Directors. The board is assisted in its responsibilities by the Audit and Actuarial Committee, consisting of five directors who are not officers or employees of the plan administrator. In addition, the committee reviews the recommendations of the internal and external auditors for improvements in internal control and the action of management to implement such recommendations. In carrying out its duties and responsibilities, the committee meets regularly with management and with both the external and internal auditors to review the scope and timing of their respective audits, to review their findings and to satisfy itself that their responsibilities have been properly discharged. This committee reviews the financial statements and recommends them for approval by the board.

The plan's external auditors, Deloitte & Touche, have conducted an independent examination of the financial statements in accordance with generally accepted auditing standards, performing such tests and other procedures as they consider necessary to express the opinion in their Report to the Administrator. The external auditors have full and unrestricted access to the Audit and Actuarial Committee to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal control systems.



CLAUDE LAMOUREUX  
PRESIDENT AND CHIEF EXECUTIVE OFFICER

February 19, 1998



ANDREW JONES  
VICE-PRESIDENT, FINANCE

## ACTUARIES' OPINION

WILLIAM M.  
**MERCER**  
LIMITED

William M. Mercer Limited was retained by the Ontario Teachers' Pension Plan Board (the "Board") to perform an actuarial valuation of the assets and the going concern liabilities of the Ontario Teachers' Pension Plan (the "Plan") as at December 31, 1997, for inclusion in the Plan's financial statements. As part of the valuation, we examined the Plan's recent experience with respect to the non-economic assumptions and presented our findings to the Board. In addition, we provided the Board with statistical, survey and other information used to develop its long-term economic assumptions.

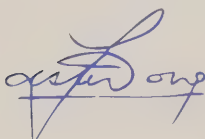
The valuation of the Plan's actuarial liabilities was based on:

- membership data provided by the Ontario Teachers' Pension Plan Board as at December 31, 1996;
- methods prescribed by the Canadian Institute of Chartered Accountants for pension plan financial statements;
- assumptions about future events (for example, future rate of inflation and future rates of return on the pension fund) which have been communicated to us as the Board's best estimate of these events;
- revised estimates received from the Board on the cost of the entitlement review project; and
- information provided by the Education Relations Commission on negotiated wage settlements in the 1996/97 and 1997/98 school years.

The objective of the financial statements is to fairly present the financial position of the Plan on December 31, 1997 as a going concern. This is different from the statutory valuation (the actuarial valuation required by the *Teachers' Pension Act*, and the *Pension Benefits Act*), which uses actuarial methods prescribed by the *Teachers' Pension Act* and cautious assumptions about future events to establish a prudent level for future contributions.

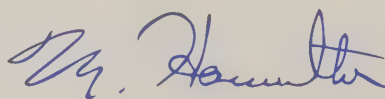
While the actuarial assumptions used to estimate liabilities for the Plan's financial statements represent the Board's best estimate of future events, and while in our opinion these assumptions are reasonable, the Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations, and will affect the financial position of the Plan, and the contributions required to fund it, at that time.

We have tested the data for reasonableness and consistency, and we believe it to be sufficient and reliable for the purposes of the valuation. We also believe that the methods employed in the valuation and the assumptions are, in aggregate, appropriate for the purposes of the valuation. Our opinions have been given, and our valuation has been performed, in accordance with accepted actuarial practice.



LESTER J. WONG, F.C.I.A.

February 19, 1998

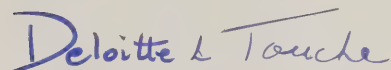


MALCOLM P. HAMILTON, F.C.I.A.

We have audited the statement of net assets available for benefits and accrued pension benefits and surplus of the Ontario Teachers' Pension Plan as at December 31, 1997 and the statements of changes in net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended. These financial statements are the responsibility of the Plan's administrator. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the net assets available for benefits and accrued pension benefits and surplus of the Plan as at December 31, 1997 and the changes in its net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended in accordance with generally accepted accounting principles.



CHARTERED ACCOUNTANTS

TORONTO, CANADA

February 19, 1998




# STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS AND ACCRUED PENSION BENEFITS AND SURPLUS

As at December 31, 1997

(\$ Millions)	1997	1996
<b>NET ASSETS AVAILABLE FOR BENEFITS</b>		
<b>Assets</b>		
Investments (note 2)	\$60,507	\$49,594
Receivable from Province of Ontario (note 4)	1,262	1,286
Receivable from brokers	956	20
Cash	15	6
Fixed assets	7	5
	<u>62,747</u>	<u>50,911</u>
<b>Liabilities</b>		
Accounts payable and accrued liabilities (note 3)	8,268	3,482
<b>Net assets available for benefits</b>	<b>54,479</b>	<b>47,429</b>
Actuarial asset value adjustment (note 1e)	(5,578)	(4,416)
<b>Actuarial value of net assets available for benefits</b>	<b>\$48,901</b>	<b>\$43,013</b>
<b>ACCRUED PENSION BENEFITS AND SURPLUS</b>		
Accrued pension benefits (note 5)	\$44,457	\$41,833
Surplus	4,444	1,180
<b>Accrued pension benefits and surplus</b>	<b>\$48,901</b>	<b>\$43,013</b>

ON BEHALF OF THE BOARD

  
 CHAIR

  
 BOARD MEMBER

## STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

For the year ended December 31, 1997

<i>(\$ Millions)</i>	1997	1996
<b>Net assets available for benefits, beginning of year</b>	<b>\$47,429</b>	<b>\$40,137</b>
<b>Investment operations</b>		
Investment income (note 6)	7,246	7,436
Investment expenses (note 10a)	(59)	(40)
Net investment operations	7,187	7,396
<b>Client service operations</b>		
Contributions (note 8)	1,696	1,445
Benefits (note 9)	(1,802)	(1,520)
Client service expenses (note 10b)	(31)	(29)
Net client service operations	(137)	(104)
<b>Net increase in net assets</b>	<b>7,050</b>	<b>7,292</b>
<b>Net assets available for benefits, end of year</b>	<b>\$54,479</b>	<b>\$47,429</b>

## STATEMENT OF CHANGES IN ACCRUED PENSION BENEFITS

For the year ended December 31, 1997

(\$ Millions)	1997	1996
Accrued pension benefits, beginning of year	\$41,833	\$38,744
<b>Increase in accrued pension benefits</b>		
Interest on accrued pension benefits	3,425	3,381
Benefits accrued (note 5a)	1,204	1,337
Changes in actuarial assumptions (note 5b)	675	455
Changes in plan provisions (note 5c)	—	258
	5,304	5,431
<b>Decrease in accrued pension benefits</b>		
Benefits paid (note 9)	1,802	1,520
Experience gains (note 5d)	878	822
	2,680	2,342
<b>Net increase in accrued pension benefits</b>	2,624	3,089
Accrued pension benefits, end of year	\$44,457	\$41,833

## STATEMENT OF CHANGES IN SURPLUS

For the year ended December 31, 1997

(\$ Millions)	1997	1996
Surplus (deficiency), beginning of year	\$1,180	\$ (514)
Increase in net assets available for benefits	7,050	7,292
Change in actuarial asset value adjustment (note 1e)	1,162	(2,509)
Increase in actuarial value of net assets available for benefits	5,888	4,783
Net increase in accrued pension benefits	(2,624)	(3,089)
Surplus, end of year	\$4,444	\$1,180



For the year ended December 31, 1997

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**DESCRIPTION OF PLAN**

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The following description of the Ontario Teachers' Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Pension Act* as amended.

(a) **GENERAL** The Plan is a contributory defined benefit pension plan co-sponsored by the Partners who are the Province of Ontario (the Province) and Plan members, represented by the Ontario Teachers' Federation. Contributions are made by active members of the Plan and matched by the Province and designated private schools and organizations. The Plan is registered with the Pension Commission of Ontario (registration number 0345785).

(b) **FUNDING** Plan benefits are funded by contributions and investment earnings. The determination of the value of the benefits and required contributions is made on the basis of periodic actuarial valuations (see note 7).

(c) **RETIREMENT PENSIONS** A retirement pension is available based on the number of years of credited service, best five-year average salary and age of the member at retirement. A member is eligible for a reduced retirement pension from age 55. An unreduced retirement pension is available at age 65 or at any age if the member has 35 years' credit or the sum of a member's age and qualifying service equals 90.

(d) **DISABILITY PENSIONS** A disability pension is available at any age to a disabled member with a minimum of 10 years of credited service. The type of disability pension is determined by the extent of the disability.

(e) **DEATH BENEFITS** Death benefits are available on the death of a member and may be available on the death of a pensioner. The benefit may take the form of a survivor pension, lump sum payment or both.

(f) **ADDITIONAL CREDITED SERVICE** Members can obtain additional credited service in the Plan for certain absences or transfers from other plans.

(g) **WITHDRAWALS FROM THE PLAN** Withdrawal refunds, transfers and commuted value transfers are available subject to the lock-in provisions when a member ceases to be employed in education prior to qualifying for an immediate pension.

(h) **INCOME TAXES** The Plan is a Registered Pension Plan as defined in the *Income Tax Act (Canada)* and, consequently, is not subject to income taxes. The Plan's registration number is 0345785.

(i) **ESCALATION OF BENEFITS** Pension benefits are adjusted annually for inflation at 100 percent of the Consumer Price Index, subject to a limit of 8 percent in any one year with any excess carried forward.

(j) **RETIREMENT COMPENSATION ARRANGEMENT** The Retirement Compensation Arrangement (the RCA) has been created by agreement between the Province of Ontario and the Ontario Teachers' Federation as a supplementary plan to provide the members of the Plan with benefits that, due to limitations imposed by the *Income Tax Act (Canada)* and its regulations, cannot be provided under the Registered Pension Plan. Because the RCA is a separate trust, the net assets available for benefits and accrued benefits of the RCA are not included in these financial statements (see note 11).

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## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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### (a) BASIS OF PRESENTATION

These financial statements present the financial position and the results of operations of the Plan and are prepared in accordance with generally accepted accounting principles.

### (b) INVESTMENTS AND DERIVATIVE CONTRACTS

**Valuation of investments** Investments are recorded as of the trade date and are stated at fair value. Fair value is the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Province of Ontario Debentures (the Debentures), which are not marketable, are stated at estimated fair values calculated by discounting the Debentures cash flows based on year-end implied market yields of comparable securities. Money market, publicly traded bonds and equity securities are valued at year-end market prices. Other investments for which market quotations are not available such as real estate, mortgages and private placements are valued on a current market yield or appraised basis.

**Valuation of derivative contracts** Interest rate, foreign currency, commodity and equity futures, forwards, options, swaps and forward rate agreements are recorded at the estimated amounts of consideration that the Plan would receive or pay at the reporting date in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act, with the resulting gain or loss being recognized in unrealized investment income.

**Securities purchased under agreements to resell** Securities purchased under agreements to resell, being securities which the Plan has purchased and simultaneously committed to resell at a specified price on a specified date, are recorded as of trade date and are stated at fair value. Interest income earned is included in income for the related investments.

**Securities sold under agreements to repurchase** Securities sold under agreements to repurchase, being securities which the Plan has sold and simultaneously committed to repurchase at a specified price on a specified date, are recorded as of trade date and are stated at fair value. Interest expense incurred is netted against interest income for the related investments.

**Securities sold but not yet purchased** Securities sold but not yet purchased, which represent the Plan's obligation to deliver securities which were not owned at the time of sale, are recorded as of trade date and are stated at fair value. Gains or losses are included in income for the related investments.

**Unrealized gains and losses** The change in the difference between fair value and the cost (being the purchase price) of investments at the beginning and end of each year represents the unrealized gain (loss) and is included in investment income.

**Accrual of income** Interest income, interest expense and dividend income has been accrued to the year end date.

### (c) FOREIGN CURRENCY TRANSLATION

Assets and liabilities related to foreign currency transactions are translated into Canadian dollars at the exchange rate in effect at the balance sheet date. The income and expense amounts related to

these transactions are translated into Canadian dollars at the rates of exchange prevailing at the dates of the transactions. The realized and unrealized gains and losses arising from these translations are included in investment income.

(d) ACCRUED PENSION BENEFITS

Accrued pension benefits and changes therein during the year are based on an actuarial valuation prepared by a firm of independent actuaries. The valuation is made as at the start of the year and then extrapolated to year end. It uses the projected benefit method prorated on service and management's best estimate of future economic events (see note 5).

(e) ACTUARIAL ASSET VALUE ADJUSTMENT

The actuarial value of net assets available for benefits is determined by reference to long-term market trends consistent with assumptions underlying the valuation of accrued pension benefits. The adjustment represents the difference between the actual and management's best estimate of return on the Plan amortized over five years. Using this adjustment, fair value remains the underlying basis for asset valuation, but fluctuations are averaged over a five year period.

The year over year change in the actuarial asset value adjustment is reflected in the Statement of Changes in Surplus.

(f) CONTRIBUTIONS AND BENEFITS

Contributions are recorded on the accrual basis except for scheduled payments from the Province which are recorded in the year in which they are received (see note 7).

Benefits are recorded on the accrual basis.

(g) USE OF ESTIMATES

In preparing these financial statements, management must make certain estimates and assumptions which primarily affect the reported values of assets and liabilities and related income and expenses.

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## 2. INVESTMENTS

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The investment objectives of the Plan are to minimize the likelihood of an increase in contribution rates and to protect the pension benefits of the Plan members. The strategy employed to achieve these objectives is to invest cash flow from contributions, maturing Debentures and investment returns into a diversified pool of Canadian and foreign assets.

The Plan has \$19.3 billion (1996 — \$19.4 billion) in non-marketable Debentures which must be held to maturity. The Debentures have interest rates and a maturity profile that exposes the Plan to significant fluctuations in fair value. To manage this and other exposures in a manner consistent with its investment objectives, the Plan uses: interest rate, foreign currency, commodity and equity futures and forwards; interest rate, commodity and equity swaps, options and forward rate agreements, (collectively called derivative contracts); and securities purchased under agreements to resell, securities sold under agreements to repurchase and securities sold but not yet purchased. These derivative contracts and other investments allow the Plan to retain the Debentures while achieving its objectives of asset diversification and reducing interest rate risk. Through derivative contracts, the investment returns from the Debentures are exchanged for returns equivalent to those which would be earned by investing directly in money market and equity securities, as described in note 2b.



The Plan utilizes options, futures, forwards and swaps in anticipation of movements in the markets. The intention of this activity is to enhance investment returns.

(a) INVESTMENTS BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS  
AND INVESTMENT-RELATED RECEIVABLES AND LIABILITIES

The schedule below summarizes the fair value and the cost of the Plan's investments including net accrued interest and dividends of \$356 million (1996 — \$348 million), before giving effect to derivative contracts and investment-related receivables and liabilities as at December 31:

(\$ Millions)	1997		1996	
	Fair Value	Cost	Fair Value	Cost
<b>Fixed income</b>				
Debentures <sup>(1)</sup>	\$19,288	\$14,376	\$19,372	\$14,752
Money market securities	2,792	2,778	2,187	2,179
Bonds				
Canadian	4,912	4,773	2,389	2,234
Foreign	1,213	1,204	336	324
Mortgages	197	187	110	109
	<b>28,402</b>	<b>23,318</b>	<b>24,394</b>	<b>19,598</b>
<b>Equities</b>				
Canadian	19,436	13,750	17,216	12,662
United States	1,426	1,164	662	539
Non-North American	4,679	3,840	4,439	3,322
	<b>25,541</b>	<b>18,754</b>	<b>22,317</b>	<b>16,523</b>
<b>Real estate</b>	<b>1,561</b>	<b>1,608</b>	<b>1,272</b>	<b>1,387</b>
	<b>55,504</b>	<b>43,680</b>	<b>47,983</b>	<b>37,508</b>
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	2,615	2,616	1,019	1,019
Receivables from derivative contracts (note 2b)	2,388	983	592	233
<b>INVESTMENTS</b>	<b>60,507</b>	<b>47,279</b>	<b>49,594</b>	<b>38,760</b>
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase (note 3)	(2,736)	(2,737)	(432)	(432)
Securities sold but not yet purchased (note 3)	(915)	(916)	(817)	(790)
Real estate indebtedness (note 3)	(371)	(339)	(274)	(274)
Accrued liabilities for derivative contracts (note 2b, 3)	(3,537)	(3,321)	(1,739)	(231)
<b>Net investments (note 2c)</b>	<b>\$52,948</b>	<b>\$39,966</b>	<b>\$46,332</b>	<b>\$37,033</b>

<sup>(1)</sup> For details, refer to the Schedule of Province of Ontario Debentures on page 51.

(b) DERIVATIVE CONTRACTS

Derivative contracts are financial contracts, the value of which is derived from the value of underlying assets or interest or exchange rates. The Plan utilizes such contracts for asset mix management purposes, for managing the Plan's exposure to interest rate and foreign currency volatility, and for trading purposes.

Notional amounts of derivative contracts represent the volume of outstanding transactions and do not represent the potential gain or loss associated with the market risk or credit risk of such transactions. Rather, they serve as the basis upon which the returns from, and the fair value of, the contracts are determined.

Derivative contracts, transacted either in the over-the-counter market directly between two counterparties or on regulated exchange markets, include:

**(i) Swap contracts** Interest rate swaps are contractual obligations in which two counterparties exchange interest rate flows over a period of time based on a notional principal amount. One party typically agrees to pay a fixed interest rate in return for receiving a floating interest rate.

Equity and commodity swaps are contractual obligations between two counterparties to exchange cash flows based upon an equity or commodity index return. Typically, one party agrees to pay a floating interest rate in return for receiving a return on a specified equity or commodity index.

**(ii) Futures and forwards contracts** Futures and forwards are contractual obligations either to buy or to sell a specified amount of money market securities, bonds, equity indices, commodities or foreign currencies at predetermined future dates and prices.

Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margining. Forwards are customized contracts transacted in the over-the-counter market. As a result of entering into these contracts, returns are generated that are equivalent to the gain or loss that would arise if the securities or foreign currencies had been bought or sold directly at the future price.

**(iii) Option contracts** Option contracts are agreements in which the right, but not the obligation, is acquired by the option purchaser from the option writer either to buy or sell on or before a specified date, a predetermined amount of a financial instrument at a stated price.

The following table summarizes the Plan's derivative contracts held as at December 31:

(\$ Millions)	1997		1996	
	Notional	Fair Value	Notional	Fair Value
<b>Asset conversion</b>				
Interest rate swaps	\$10,856	\$(1,441)	\$9,737	\$(1,318)
Equity and commodity swaps	11,818	2,894	9,737	1,332
		<u>1,453</u>		<u>14</u>
<b>Interest rate management</b>				
Interest rate swaps	4,020	(12)	6,435	(172)
Futures	5,412	(3)	2,675	(4)
Forwards	—	—	200	(1)
Options				
Purchased	968	3	2,587	—
Written	197	(1)	560	(6)
		<u>(13)</u>		<u>(183)</u>
<b>Foreign currency management</b>				
Forwards	15,653	(31)	12,112	(77)
<b>Trading</b>				
Interest rate swaps	1,583	(21)	100	(1)
Futures	1,487	(31)	245	—
Forwards	9,943	(164)	649	1
Options				
Purchased	3,220	18	405	—
Written	1,905	(36)	1,009	(7)
		<u>(234)</u>		<u>(7)</u>
		1,175		(253)
Less: Net cash collateral received under derivative contracts		<u>(2,324)</u>		<u>(894)</u>
<b>Net fair value of derivative contracts</b>		<u>\$(1,149)</u>		<u>\$(1,147)</u>
<b>Represented by:</b>				
Receivables from derivative contracts		\$ 2,388		\$ 592
Accrued liabilities for derivative contracts (note 3)		(3,537)		(1,739)
		<u>\$(1,149)</u>		<u>\$(1,147)</u>



The derivative contracts on page 40 mature within one year except for the following which have a weighted average maturity (in years) of:

	1997	1996
<b>Asset conversion</b>		
Interest rate swaps	5.4	6.6
Equity and commodity swaps	1.4	1.6
<b>Interest rate management and trading</b>		
Interest rate swaps	4.5	2.2

(c) INVESTMENTS AFTER ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS AND INVESTMENT-RELATED RECEIVABLES AND LIABILITIES

The Plan's investments at fair value, before and after giving effect to the derivative contracts and investment-related receivables and liabilities on the Plan's investments at December 31, are summarized below:

(\$ Millions)	1997		1996	
	At Fair Value (per Note 2a)	Effective Net Investments at Fair Value	At Fair Value (per Note 2a)	Effective Net Investments at Fair Value
<b>Fixed income</b>	\$28,402	\$11,873	\$24,394	\$11,688
<b>Equities</b>				
Canadian	19,436	19,433	17,216	17,367
United States	1,426	9,069	662	6,186
Non-North American	4,679	11,012	4,439	9,819
	25,541	39,514	22,317	33,372
<b>Real estate</b>	1,561	1,561	1,272	1,272
	55,504	52,948	47,983	46,332
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	2,615	—	1,019	—
Receivables from derivative contracts	2,388	—	592	—
<b>INVESTMENTS</b>	60,507	52,948	49,594	46,332
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase	(2,736)	—	(432)	—
Securities sold but not yet purchased	(915)	—	(817)	—
Real estate indebtedness	(371)	—	(274)	—
Accrued liabilities for derivative contracts	(3,537)	—	(1,739)	—
<b>Net investments</b>	\$52,948	\$52,948	\$46,332	\$46,332

(d) INTEREST RATE RISK

Interest rate risk refers to the adverse consequences of interest rate changes on the Plan's cash flows, financial position and income. This risk arises from differences in the timing and amount of cash flows related to the Plan's assets and liabilities.

The value of the Plan's assets is affected by short-term changes in nominal interest rates and equity markets. Pension liabilities are exposed to the long-term expectation of rate of return on the investments as well as expectations of inflation and salary escalation.

The Plan's primary exposure is to a decline in the long-term real rate of return which may result in higher contribution rates required to meet pension obligations. As at December 31, 1997, holding the inflation and salary escalation assumptions constant, a 1% change in the assumed real long-term rates of return would result in a change in the pension liabilities of approximately 16% (1996 — 14%).

To match these liabilities the Plan has established a policy asset mix of approximately 75% equities and 25% fixed income securities. The returns on fixed income securities are sensitive to changes in nominal interest rates while long-term equity returns have historically shown high correlation with changes in inflation and salary escalation.

After giving effect to the derivative contracts and investment-related receivables and liabilities discussed in Note 2b, a 1% increase in nominal interest rates would result in a decline in the value of the fixed income securities of 6.8% (1996 — 6.7%).

(e) CREDIT RISK

Credit risk is the risk of loss in the event the counterparty to a transaction defaults, or otherwise fails to perform under the terms of a contract.

At December 31, 1997, the Plan's most significant concentration of credit risk was with the Province. This concentration relates primarily to the holding of \$19.3 billion of Debentures, a receivable of \$1.3 billion and future funding requirements of the Plan.

The Plan limits derivative contract credit risk by dealing with counterparties that have a credit rating of A and higher, and by utilizing an internal credit limit monitoring process, as well as through the use of credit mitigation techniques such as master netting arrangements and obtaining collateral where appropriate.

(f) FOREIGN CURRENCY RISK

Foreign currency exposure arises from the Plan's holdings of foreign currency-denominated equities; equity, commodity and currency swaps; equity and currency options; bonds and money market securities and related derivative contracts.

The Plan hedges some of this exposure based on interest rate spreads between various countries or other economic fundamentals. The Plan also takes trading positions in foreign currencies with the objective of increasing returns. As at December 31, 1997, the Plan's net foreign currency exposure after giving effect to the related hedge was as follows:

(\$ Millions)		1997		1996
Country	Foreign	Net Foreign	Net Foreign	Net Foreign
	Currency	Currency	Currency	Currency
	Exposure	Hedge	Exposure	Exposure
United States	\$ 9,520	\$4,198	\$ 5,322	\$2,330
Japan	2,747	1,301	1,446	1,028
United Kingdom	2,090	1,149	941	975
France	822	415	407	349
Germany	872	514	358	373
Switzerland	658	409	249	266
Other	3,861	—	3,861	3,801
	<b>\$20,570</b>	<b>\$7,986</b>	<b>\$12,584</b>	<b>\$9,122</b>

### 3. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

(\$ Millions)	1997	1996
Accrued liabilities for derivative contracts	\$3,537	\$1,739
Securities sold under agreements to repurchase	2,736	432
Securities sold but not yet purchased	915	817
Payable to brokers	654	174
Real estate indebtedness	371	274
Other accounts payable and accrued liabilities	55	46
	<b>\$8,268</b>	<b>\$3,482</b>

### 4. RECEIVABLE FROM THE PROVINCE OF ONTARIO

The receivable from the Province consists of required matching contributions and interest thereon.

(\$ Millions)	1997	1996
Contributions receivable	\$1,175	\$1,200
Accrued interest	87	86
	<b>\$1,262</b>	<b>\$1,286</b>

The receivable from the Province is comprised of amounts to be received as follows: \$668 million in 1998 and \$594 million in 1999.

## 5. ACCRUED PENSION BENEFITS

### (a) BENEFITS ACCRUED

Benefits accrued in 1997 include \$22 million (1996 — \$129 million) to provide for the increase in pensions determined as a result of a review of all pensions currently in pay.

### (b) ACTUARIAL ASSUMPTIONS

The actuarial assumptions used in determining the value of accrued pension benefits reflect management's best estimate of expected long-term economic trends, as follows:

	1997	1996
Asset rate of return	7.75%	8.25%
Salary escalation rate	4.00%	4.50%
Inflation rate	3.00%	3.50%

In 1997 there was a change in the assumed inflation rate from 3.5% to 3.0%. Since the assumed rate of return on assets and the salary escalation rate are influenced by the inflation assumption, these have also been reduced by 0.5% from last year's level.

In addition, there was a change in the assumed retirement rates to recognize Plan changes and emerging experience. The changes in the actuarial assumptions in 1997 resulted in a net increase in the value of accrued pension benefits of \$675 million. In 1996, the changes to the actuarial assumptions, principally in the economic assumptions and retirement rates, resulted in a net increase in the value of accrued pension benefits of \$455 million.

### (c) PLAN PROVISIONS

The Plan was amended effective January 1, 1997 to incorporate changes arising out of the arbitration award handed out to the Partners in January 1997. The main changes having a direct impact on the actuarial valuation of the Plan are the provision of an unreduced pension after 35 years of credited service, the lowering of the early retirement reduction before the attainment of the 90 factor and the lowering of the Canada Pension Plan reduction. These changes which were recognized in 1996 resulted in an increase in the value of accrued pension benefits of \$258 million.

### (d) EXPERIENCE GAINS

Experience gains of \$878 million (1996 — \$822 million) arose from differences between the actuarial assumptions and actual results and relate primarily to current experience for members salary and inflation rates.



## 6. INVESTMENT INCOME

### (a) INVESTMENT INCOME BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS

Investment income, before giving effect to derivative contracts and before allocating the realized and unrealized net gains/losses, for the year ended December 31, is as follows:

(\$ Millions)	1997	1996
<b>Interest income</b>		
Debentures (net of interest incurred on swap contracts)	\$ 820	\$ 882
Money market securities	109	132
Bonds		
Canadian	190	143
Foreign	37	12
Mortgages	11	7
	<u>1,167</u>	<u>1,176</u>
<b>Dividend income</b>		
Canadian equities	313	303
United States equities	10	1
Non-North American equities	185	135
	<u>508</u>	<u>439</u>
<b>Real estate</b>		
(net of interest expense of \$27 million; 1996 — \$28 million)	74	57
	<u>1,749</u>	<u>1,672</u>
<b>Net gain on investments<sup>(1)</sup></b>	<u>5,497</u>	<u>5,764</u>
	<u>\$7,246</u>	<u>\$7,436</u>

<sup>(1)</sup> Includes net unrealized gains of \$3,345 million (1996 — \$3,431 million).

### (b) INVESTMENT INCOME AFTER ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS

Investment income by asset class, after giving effect to the derivative contracts and allocating the realized and unrealized net gains for the year ended December 31, is as follows:

(\$ Millions)	1997	1996
Fixed income <sup>(2)</sup>	\$1,700	\$1,490
Canadian equities	3,021	3,738
United States equities <sup>(2)</sup>	1,696	1,049
Non-North American equities <sup>(2)</sup>	530	1,081
Real estate	299	78
	<u>\$7,246</u>	<u>\$7,436</u>

<sup>(2)</sup> Includes net realized and unrealized foreign currency translation gains (losses) of \$(302) million (1996 — \$93 million).

## (c) INVESTMENT RATES OF RETURN AND RELATED BENCHMARKS

Investment rates of return and related benchmarks by asset class for the year ended December 31, 1997, are as follows:

	<i>Investment Rates of Return</i>	<i>Investment Benchmark Return</i>
Fixed income	11.4%	11.5%
Canadian active equity	19.1	15.0
Canadian index equity	15.1	15.0
United States equity	37.3	39.2
Non-North American equity	5.1	5.1
Real estate	22.2	12.6
Merchant banking	52.9	17.0
<b>Total Plan</b>	<b>15.6%</b>	<b>15.6%</b>

Investment rates of return have been calculated in accordance with the acceptable methods set forth by the Association for Investment Management and Research and the Pension Investment Association of Canada.

The Plan identifies benchmarks to evaluate the performance of the investment management process. The performance of each portfolio is measured against benchmarks that simulate the results of the markets in which the managers invest.

The Total Plan return is measured against a composite benchmark produced by aggregating returns from each of the portfolio benchmarks, using the asset mix policy weight. The Total Plan return incorporates the Plan's currency trading program, currency overlay policy and tactical asset allocation decisions.

## 7. FUNDING POLICY

Statutory actuarial valuations are prepared periodically in accordance with the *Teachers' Pension Act* to determine the funding requirements of the Plan. Active members are currently required to contribute 7.3 percent of the portion of their salaries covered by the Canada Pension Plan and 8.9 percent of salaries above this level. Aggregate member contributions are matched by the Province and other employers.

The actuarial assumptions and methods used to determine statutory pension liabilities are different than those used to calculate the amounts disclosed in these financial statements. The statutory valuations use a conservative approach and also take into account benefits earned and contributions that will be made after the valuation date.

The initial statutory valuation of the Plan, prepared by William M. Mercer Limited as at January 1, 1990, disclosed an unfunded liability of \$7.8 billion which was the amount by which the Plan's liabilities exceeded the assets. This liability is the responsibility of the Province and is being paid off with interest by a series of scheduled payments over the 40-year period which began January 1, 1990. Subsequent statutory valuations treat the present value of the remaining scheduled payments as an asset. As at January 1, 1996, the present value of these scheduled payments amounted to \$8.4 billion.

The last statutory valuation as at January 1, 1996 disclosed an actuarial gain of \$712 million. Pursuant to the Partnership Agreement between the Ontario Teachers' Federation and the Province, the Partners entered into negotiations and ultimately arbitration to decide how to utilize the gain. The gain was applied to improve certain benefits under the Plan which amounted to \$456 million. In addition, the assumed retirement rates were modified to recognize plan changes and emerging experience, which reduced the gain by a further \$178 million, leaving a net gain of \$78 million in the Plan. This gain has been retained in the Plan.

The next scheduled statutory valuation is to be prepared as at January 1, 1999.

## 8. CONTRIBUTIONS

(\$ Millions)	1997	1996
<b>Members</b>		
Current service	\$ 577	\$ 605
Optional credit	5	5
	<u>582</u>	<u>610</u>
<b>Province of Ontario</b>		
Current service	574	597
Scheduled payments	456	152
Optional credit	4	3
Interest	63	64
	<u>1,097</u>	<u>816</u>
Other employers	8	9
Transfer from other pension plans	9	10
	<u>17</u>	<u>19</u>
	<u>\$1,696</u>	<u>\$1,445</u>

## 9. BENEFITS

(\$ Millions)	1997	1996
Retirement pensions	\$1,548	\$1,339
Disability pensions	33	30
Death benefits	80	73
Refunds	27	18
Commutated value transfers	108	48
Transfers to other plans	6	12
	<u>\$1,802</u>	<u>\$1,520</u>

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10. ADMINISTRATIVE EXPENSES

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## (a) INVESTMENT EXPENSES

(\$ Millions)	1997	1996
Salaries and benefits	\$22.0	\$15.6
Investment management fees	16.0	8.2
Premises and equipment	6.4	4.9
Custodial fees	5.8	4.4
Professional consulting services	3.0	2.6
Information services	2.5	2.2
Communication and travel	1.8	1.0
Statutory audit fees	0.5	0.3
All other	1.1	0.7
	<u>\$59.1</u>	<u>\$39.9</u>

## (b) CLIENT SERVICE EXPENSES

(\$ Millions)	1997	1996
Salaries and benefits	\$19.0	\$17.4
Premises and equipment	5.4	5.1
Professional consulting services	4.1	4.1
Communication and travel	1.6	1.6
Board and committee remuneration	0.2	0.2
Statutory audit fees	0.3	0.3
All other	0.8	0.6
	<u>\$31.4</u>	<u>\$29.3</u>



## (c) EXECUTIVE COMPENSATION

The compensation table represents full disclosure of base salary, annual bonus, long-term incentives and other compensation earned in 1995, 1996 and 1997 by the Chief Executive Officer and the four other most highly compensated executives.

<i>Name and Principal Position</i>	<i>Year</i>	<i>Base Salary<sup>(1)</sup></i>	<i>Annual Bonus<sup>(2)</sup></i>	<i>Long-term Incentive<sup>(3)</sup></i>	<i>Group Term Life Insurance</i>	<i>Other Compensation</i>
Claude Lamoureux <i>President &amp; CEO</i>	1997	\$322,220	\$148,400	\$302,885	\$897	\$ 9,600 <sup>(4)</sup>
	1996	300,100	157,100	260,952	868	9,600
	1995	296,656	119,400	476,000	842	34,600
Robert Bertram <i>Senior V.P. Investments</i>	1997	\$276,775	\$159,400	\$264,460	\$756	\$ 8,000 <sup>(4)</sup>
	1996	261,404	107,400	230,076	741	16,333
	1995	255,928	66,000	428,400	726	33,000
Heather Hunter <i>V.P. Active Equities</i>	1997	\$173,481	\$289,700	\$106,869	\$483	—
	1996	162,580	155,000	93,375	470	—
	1995	159,606	85,800	166,600	461	—
Brian Muzyk <i>V.P. Real Estate</i>	1997	\$159,928	\$267,000	\$ 96,134	\$445	—
	1996	149,878	141,300	83,415	433	—
	1995	149,379	113,300	148,750	424	—
Morgan McCague <i>V.P. Core Domestic</i>	1997	\$157,773	\$258,600	\$ 86,016	\$431	—
	1996	147,926	139,600	155,825	420	—
	1995	142,070	107,200	—	411	—

<sup>(1)</sup> The 1997 base salary includes 27 bi-weekly pay dates.

<sup>(2)</sup> The annual bonus structure for investment professionals was revised in 1997, thereby enhancing bonus opportunities for performance within the top quartile of benchmark comparators. Bonuses are based on a combination of total fund, asset class, and individual performance, measured in dollars of value added. Performance versus benchmark is measured over four annual performance cycles.

<sup>(3)</sup> The long-term investment incentive program is designed to ensure the organization's competitiveness to attract and retain senior investment professionals. The plan measures the amount total fund performance net of costs exceeds a composite benchmark over a four-year period. The benchmark is established from market indices for portfolio performance using the fund's policy asset-mix weights.

<sup>(4)</sup> Automobile allowance.

## 11. RETIREMENT COMPENSATION ARRANGEMENT

The Retirement Compensation Arrangement (RCA) is established in an agreement between the Province of Ontario and the Ontario Teachers' Federation (the Partners) to provide to the members of the Plan, certain benefits that would have been provided under the Registered Pension Plan, but for amendments made to the *Income Tax Act (Canada)* and its Regulations that restrict benefits that may be provided under a registered plan for periods of service after 1991 and for certain periods before 1992 that are credited after 1991.

The RCA is administered under a trust separate from the assets of the Registered Pension Plan. The Ontario Teachers' Pension Plan Board (the Board) has been appointed by the Partners to act as the trustee of the RCA.

Because the RCA is a separate trust, the net assets available for benefits and the value of accrued benefits and deficiency, referred to below, have not been included in the accompanying financial statements of the Registered Pension Plan on pages 32 to 50.

The RCA is funded on a pay-as-you-go basis from a portion of the contributions made to the Board by teachers, the Province of Ontario and designated private schools and organizations. The portion is based on a rate determined periodically by the Board's independent actuary in a manner that is expected to be sufficient to pay the benefits over the next twelve months. Due to the funding policy adopted by the Partners, the assets will continue to be substantially less than the liabilities.

A summary of the balance sheet for the RCA, as at December 31, is as follows:

(\$ Thousands)	1997	1996
<b>Net assets available for benefits</b>		
Assets	\$ 886	\$ 368
Liabilities	(195)	(21)
	<u>\$ 691</u>	<u>\$ 347</u>
<b>Accrued benefits and deficiency</b>		
Accrued benefits	\$273,210	\$346,642
Deficiency	(272,519)	(346,295)
	<u>\$ 691</u>	<u>\$ 347</u>

The actuarial assumptions used in determining the value of the accrued benefits reflect management's best estimate of expected long-term economic trends as follows:

	1997	1996
Asset rate of return	3.875%	4.125%
Salary escalation rate	4.000%	4.500%
Inflation rate	3.000%	3.500%

The assumed asset rate of return has been adjusted to reflect the fact that the RCA investment returns are taxed at a rate of 50 percent.

The estimate of the value of accrued benefits is highly sensitive to salary increases both actual and assumed. Any changes to the salary assumptions will have a significant impact on the liabilities for future benefits.

In addition, significant uncertainty exists in projecting the trend of the liabilities of the RCA due to:

- possible changes in the number of superintendents and directors of education in the future as a result of possible changes in the education system;
- the difference between future increases in teachers' salaries and future increases in the average national wage; and
- the possibility of changes in indexing the maximum pension limit, under the *Income Tax Act (Canada)* and its Regulations.

It is also difficult to predict the benefits expected to be paid over the next twelve months, and therefore, it is possible that the assets are insufficient to pay the benefits. In such a case, the payment of benefits will be suspended and the contributions raised in order to fund the payments required to re-instate the benefits.

# INVESTMENTS OVER \$20 MILLION

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As at December 31, 1997

## FIXED INCOME

(\$ Millions)

Type	Maturity Date	Coupon (%)	Fair Value	Cost
Canadian Treasury bills	1998	2.95-4.43	\$1,425	\$1,416
Real return Canada bonds	2021-2032	4.25-4.50	1,428	1,285
Government of Canada bonds	1998-2027	4.75-11.75	1,151	1,148
International bonds	1999-2085	5.50-12.00	1,179	1,170
Canadian corporate bonds	1999-2059	4.75-11.25	1,449	1,446
Term deposits	1998	3.86-5.75	121	121
Commercial paper	1998	3.59-4.90	865	863
Index-linked mortgages	2018-2025	4.74-5.50	197	187
Collateralized loans	1998	3.79-4.58	281	281
Securities purchased under agreements to resell	1998	3.53-4.58	2,615	2,616
Securities sold under agreements to repurchase	1998	3.53-6.75	(2,736)	(2,737)

## PROVINCE OF ONTARIO DEBENTURES

(\$ Millions)

Maturity Date	Coupon (%)	Fair Value	Cost
1998 to 2000	7.00-7.99	\$ 5	\$ 5
	8.00-8.99	301	286
	9.00-9.99	1,086	1,025
	11.00-11.99	481	421
	12.00-12.99	131	121
	13.00-13.99	159	137
	14.00-14.99	109	107
		2,272	2,102
2001 to 2005	9.00-9.99	756	646
	10.00-10.99	591	502
	11.00-11.99	687	549
	12.00-12.99	1,668	1,206
	13.00-13.99	1,054	760
	14.00-14.99	509	335
		5,265	3,998
2006 to 2010	10.00-10.99	4,086	2,996
	11.00-11.99	3,186	2,253
	12.00-12.99	605	420
	13.00-13.99	22	15
	15.00-15.99	1,614	945
		9,513	6,629
2011 to 2012	10.00-10.99	158	110
	11.00-11.99	1,638	1,095
		1,796	1,205
Total Debentures Net of Accrued Interest		18,846	13,934
Accrued Interest		442	442
<b>Total</b>		<b>\$19,288</b>	<b>\$14,376</b>

## CORPORATE SHARES

(Millions)

<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>
BCE Inc.	17.3	825.7	Canadian Occidental		
Royal Bank of Canada	9.7	731.1	Petroleum Ltd.	3.3	106.7
Maple Leaf Foods Inc.	37.9	598.4	Transalta Corporation	4.7	106.1
Canadian Imperial Bank			Imperial Oil Limited	1.1	104.5
of Commerce	13.4	596.6	Sun Media Corporation	7.6	103.6
Bank of Montreal	8.7	549.6	National Bank of Canada	4.4	103.2
Northern Telecom Limited	3.9	494.3	Moore Corporation Limited	4.6	99.4
Toronto-Dominion Bank, The	9.2	493.0	MetroNet Communications Corp.	4.0	97.0
Bank of Nova Scotia, The	6.9	467.1	Anderson Exploration Ltd.	6.8	95.6
Cadillac Fairview Corporation	13.5	447.5	EdperBrascan Corporation	3.6	93.1
Canadian Pacific Limited	9.5	367.6	Toronto 35 Index Participation		
Barrick Gold Corporation	10.3	274.3	Fund Units	2.6	92.9
Imasco Limited	5.4	273.1	International Comfort Products		
Alcan Aluminium Limited	6.9	270.1	Corporation	7.9	92.9
Seagram Company Ltd., The	5.6	259.6	Fairfax Financial Holdings Limited	0.3	86.2
Bombardier Inc.	8.6	252.3	Abitibi-Consolidated Inc.	4.3	86.0
Suncor Energy Inc.	4.5	221.4	Air Canada	5.7	82.9
Nova Corporation	15.8	214.8	Geac Computer Corporation		
Petro-Canada	7.9	205.5	Limited	1.8	82.6
Laidlaw Inc.	10.3	201.1	BioChem Pharma Inc.	2.8	81.6
Magna International Inc.	2.2	195.4	BC TELECOM Inc.	1.8	80.5
Newbridge Networks Corporation	3.7	185.2	Canadian Natural Resources		
Thomson Corporation, The	4.7	184.4	Limited	2.5	77.5
TransCanada PipeLines Limited	5.5	176.5	Power Financial Corporation	1.5	73.8
Telus Corporation	5.4	171.2	George Weston Limited	0.6	72.4
MacMillan Bloedel Limited	11.5	170.9	Linamar Corporation	0.9	72.3
Potash Corporation of			Franco-Nevada Mining Corporation		
Saskatchewan Inc.	1.4	166.3	Limited	2.6	72.1
Canadian National Railway			Co-Steel Inc.	3.7	70.3
Company	2.3	155.6	Mackenzie Financial Corporation	3.8	70.0
Talisman Energy Inc.	3.5	155.1	Philip Services Corp.	3.3	67.4
Alberta Energy Company Ltd.	5.4	150.6	Norcen Energy Resources Limited	4.1	67.1
Power Corporation of Canada	2.9	150.1	Loewen Group Inc., The	1.8	66.3
Newcourt Credit Group Inc.	3.1	146.8	Canadian Tire Corporation		
Encal Energy Ltd.	31.1	146.4	Limited	2.1	65.7
Placer Dome Inc.	7.9	141.6	Teck Corporation	2.9	63.5
ATS Automation Tooling			Cameco Corporation	1.4	63.5
Systems Inc.	5.0	133.1	Shell Canada Limited	2.5	63.3
Inco Limited	5.3	131.4	Donohue Inc.	2.4	63.3
Gulf Canada Resources Limited	13.0	130.3	CanWest Global Communications		
Noranda Inc.	5.2	127.8	Corp.	2.4	61.8
IPL Energy Inc.	1.9	126.3	Oshawa Group Limited, The	2.4	61.2
Westcoast Energy Inc.	3.8	125.1	Elf Aquitaine SA	0.4	60.6
Trizec Hahn Corporation	3.6	121.9	Le Groupe Vidéotron Ltée	4.8	60.2
Renaissance Energy Ltd.	4.0	119.2	Falconbridge Limited	3.3	59.7
United Dominion Industries			Hitachi Ltd.	5.2	56.8
Limited	3.2	116.7	Iberdrola S.A.	3.0	56.8
Agrium Inc.	6.2	107.5	Noranda Forest Inc.	7.2	56.0



## CORPORATE SHARES

(Millions)

Security Name	Shares	Fair Value \$	Security Name	Shares	Fair Value \$
Telesystem International			Stelco Inc.	4.1	38.3
Wireless Inc.	2.7	54.8	Nova Scotia Power Inc.	2.2	38.2
Bayer AG	1.0	54.3	Brookfield Properties Corporation	1.6	37.7
Ballard Power Systems Inc.	0.5	53.6	Prime Resources Group Inc.	3.9	37.5
Kinross Gold Corporation	11.0	53.2	Molson Companies Limited, The	1.5	37.1
Inmet Mining Corporation	9.1	52.3	Cognos Incorporated	1.1	37.0
Dofasco Inc.	2.3	52.2	Mitel Corporation	3.3	36.4
Telefonica de Espana	1.0	51.9	Canadian Utilities Limited	0.9	36.4
ABN Amro Holding NV	1.9	51.8	Sony Corporation	0.3	36.3
National Australia Bank Limited	2.6	51.2	Amber Energy Inc.	1.8	36.1
Loblaw Companies Limited	2.0	51.2	Jardine Strategic Holdings Ltd	9.5	35.8
Euro-Nevada Mining Corporation	2.6	50.9	G.T.C. Transcontinental Group Ltd.	2.9	35.5
Hudson's Bay Company	1.7	50.7	Telefonos de Mexico SA	0.4	34.3
Novartis AG	0.02	50.1	Royal PTT Nederland NV	0.6	34.2
Québecor Inc.	2.0	50.1	Fuji Photo Film	0.6	34.1
Precision Drilling Corporation	1.4	49.8	Four Seasons Hotels Inc.	0.8	34.0
Rio Algom Limited	2.0	49.4	Telecom Italia SpA	4.1	33.8
Poco Petroleum Ltd.	3.8	48.5	British Steel plc	10.9	33.5
Hutchison Whampoa Limited	5.4	48.0	Call-Net Enterprises Inc.	1.5	33.3
IPSCO Inc.	0.9	47.4	Berkley Petroleum Corp.	2.2	33.2
Newcourt Credit Group Inc.			The News Corporation Limited	4.5	33.2
Fully Paid Subscription Rights	1.0	47.3	Banque Nationale de Paris	0.4	32.7
HSBC Holdings	1.3	46.9	Northstar Energy Corporation	3.2	32.5
Great-West Lifeco Inc.	1.2	46.7	BC Gas Inc.	1.2	32.5
Nokia AB (OY)	0.5	45.9	Teleglobe Inc.	0.7	32.5
Novo Nordisk A/S	0.2	45.9	Tembec Inc.	4.2	32.4
Manitoba Telecom Services Inc.	3.1	45.9	Doman Industries Limited	6.2	32.4
Investors Group Inc.	1.0	45.6	Axa-UAP	0.3	31.8
Methanex Corporation	4.0	45.3	Svenska Handelsbanken	0.6	29.7
MDS Inc.	1.3	44.3	Pacalta Resources Ltd.	1.8	29.7
Cinram International Inc.	0.9	44.1	Westaim Corporation, The	4.1	29.6
Fletcher Challenge Canada Limited	2.3	44.1	Québecor Printing Inc.	1.2	28.9
Goldcorp Inc.	7.8	44.1	Shell Transport & Trading Company	2.8	28.7
Trimark Financial Corporation	0.7	43.9	Canadian Fracmaster Ltd.	1.3	28.2
JDS FTEL Inc.	0.5	43.5	Singapore Airlines Ltd.	3.0	28.0
Finning International Inc.	2.4	43.2	British Energy PLC	2.8	28.0
Avenor Inc.	2.1	43.0	Tesco plc	2.4	27.9
CAE Inc.	3.7	41.6	Cominco Ltd.	1.3	27.9
BTR plc	9.6	41.6	ATI Technologies Inc.	0.8	27.7
Torstar Corporation	0.8	41.4	Sherritt International Corporation	4.7	27.5
Extencicare Inc.	2.1	41.1	Canfor Corporation	3.2	27.2
Acktion Corporation	2.2	40.9	Westburne Inc.	1.7	27.0
Cheung Kong (Holding) Ltd.	4.3	40.6	Shaw Communications Inc.	1.8	27.0
Veba AG	0.4	40.3	Alliance Forest Products Inc.	1.1	27.0
Deutsche Bank AG	0.4	40.1	Toronto 100 Index Participation Fund Units	0.7	26.9
Sears Canada Inc.	2.0	39.3	Swire Pacific Ltd.	4.1	26.8
Royal Group Technologies Limited	1.2	38.9			
Onex Corporation	1.3	38.4			

## CORPORATE SHARES

(Millions)

Security Name	Shares	Fair Value \$	Security Name	Shares	Fair Value \$
Dundee Bancorp Inc.	0.9	26.5	Philips Electronics N.V.	0.3	22.8
Atco Ltd.	0.8	26.2	BG plc	3.5	22.7
National Westminster Bank PLC	1.1	26.0	Compagnie Financiere de Paribas	0.2	22.6
Maritime Telegraph and Telephone Company, Limited	0.8	25.9	Matsushita Electric Industrial Co.	1.1	22.6
Johnson Electric Holdings Ltd.	6.2	25.6	SMH AG	0.03	22.5
Southam Inc.	0.9	25.5	Trilon Financial Corporation	1.9	22.4
Hong Kong Telecommunications Ltd.	8.6	25.4	Dupont Canada Inc.	0.6	22.3
Total SA	0.2	25.2	Eisai Company, Ltd.	1.0	22.2
Metro-Richelieu Inc.	1.7	25.1	Banco Bilbao Vizcaya, S.A.	0.5	22.2
Unidanmark A/S	0.2	24.8	Barclays PLC	0.6	22.1
Tele Danmark A/S	0.3	24.7	Dreco Energy Services Ltd.		
Intrawest Corporation	1.0	24.7	“Exchangeable Shares”	0.5	22.1
Pioneer Natural Resources (Canada) Ltd. “Exchangeable Shares”	0.6	24.6	Energy Group PLC	1.4	22.1
United Utilities plc	1.3	24.4	Slocan Forest Products Ltd.	2.9	22.0
AGF Management Limited	0.4	24.2	Rogers Communications Inc.	3.2	22.0
Railtrack Group PLC	1.1	24.2	PanCanadian Petroleum Limited	1.0	22.0
Crestar Energy Inc.	1.1	24.2	WIC Western International Communications Limited	0.7	21.8
Biovail Corporation International	0.4	23.9	Penn West Petroleum Ltd.	1.4	21.6
Nippon Telegraph & Telephone	0.002	23.7	Domtar Inc.	2.2	21.4
Nestle SA	0.01	23.4	Coles Myer Limited	3.1	21.4
Tomkins plc	3.4	23.4	Thames Water plc	1.0	21.1
Pharmacia & Upjohn, Inc.	0.4	23.3	Aur Resources Inc.	6.1	21.1
Ranger Oil Limited	2.4	23.3	Ensign Resource Service Group Inc.	0.6	20.8
Dexia France	0.1	23.2	Midland Walwyn Inc.	1.0	20.5
Brambles Industries Limited	0.8	23.2	Suez Lyonnaise des Eaux	0.1	20.5
Carter Holt Harvey Limited	10.4	23.1	Bayerische Motoren Werke (BMW) AG	0.02	20.3
Tesco Corporation	1.1	22.9	TVX Gold Inc.	4.2	20.2
Fiat SpA	5.5	22.8	Electrolux AB	0.2	20.2
			Nycomed Amersham plc	0.4	20.1

## CONVERTIBLE DEBENTURES

(\$ Millions)

Security Name	Par Value	Fair Value
Power Financial Corporation 8.0% Due April 30, 2014	\$85.5	\$211.5
Telecom Telesystem Ltd. 5.44% Due November 18, 2002	21.3	66.6

## REAL ESTATE PORTFOLIO

Property	Total Square Footage	Effective % Ownership
(in thousands)		
Regional Shopping Centres		
Fairview Park Mall, Kitchener	744	75.0%
Georgian Mall, Barrie	532	75.0%
Hillcrest Mall, Richmond Hill	546	100.0%
Intercity Shopping Centre, Thunder Bay	447	100.0%
Markville Shopping Centre, Markham	971	100.0%
New Sudbury Centre, Sudbury	491	100.0%
Polo Park Mall, Winnipeg	830	100.0%
Southland Mall, Regina	383	100.0%
Chinook Centre, Calgary	1,117	100.0%
Richmond Centre, Vancouver	488	100.0%
Office and Other Properties		
1 Queen Street East and		
20 Richmond Street East, Toronto	513	50.0%
Granville Square, Vancouver	415	100.0%
The Station, Vancouver	152	100.0%
Waterfront Centre, Vancouver	402	100.0%
Industrial Portfolio, Calgary	1,071	100.0%
Granville Square II, Vancouver	—	50.0%
Toronto-Dominion Centre, Toronto — Participating loan	4,134	37.5%

## PRIVATE COMPANIES AND PARTNERSHIPS

Absolute Return Fund Ltd.  
 BC European Capital V  
 DLJ Merchant Banking Partners II, L.P.  
 Elis S.A.  
 Enron Energy Services, Inc.  
 Inuvialuit Energy Inc.  
 Maple Partners Financial Group Inc.  
 Maple Leaf Gardens, Limited  
 Philip Utilities Management Corporation  
 Providence Equity Partners Fund II, L.P.  
 Providence Media Partners, L.P.  
 Schroder Asia Pacific Fund II  
 Trinity I Fund L.P.

# EIGHT-YEAR REVIEW

For the year ended December 31

(\$ Millions)	1997	1996	1995	1994	1993	1992	1991	1990
<b>CHANGE IN NET ASSETS</b>								
<b>Income</b>								
Investment income	\$ 7,246	\$ 7,436	\$ 5,656	\$ 528	\$ 5,907	\$ 2,145	\$ 3,843	\$ 1,031
Contributions								
Members	582	610	615	674	647	655	597	526
Province of Ontario	649	673	669	704	712	740	663	587
— special payments	456	152	—	—	—	438	270	187
Repayment of refunds and transfers	9	10	21	58	42	56	54	33
<b>Total Income</b>	<b>8,942</b>	<b>8,881</b>	<b>6,961</b>	<b>1,964</b>	<b>7,308</b>	<b>4,034</b>	<b>5,427</b>	<b>2,364</b>
<b>Expenditures</b>								
Benefits paid	1,802	1,520	1,261	1,130	1,001	921	829	760
Administrative expenses	90	69	57	51	44	37	25	20
Distribution of gain	—	—	—	—	325	—	—	—
<b>Total Expenditures</b>	<b>1,892</b>	<b>1,589</b>	<b>1,318</b>	<b>1,181</b>	<b>1,370</b>	<b>958</b>	<b>854</b>	<b>780</b>
<b>INCREASE IN NET ASSETS</b>	<b>\$ 7,050</b>	<b>\$ 7,292</b>	<b>\$ 5,643</b>	<b>\$ 783</b>	<b>\$ 5,938</b>	<b>\$ 3,076</b>	<b>\$ 4,573</b>	<b>\$ 1,584</b>
<b>NET ASSETS</b>								
<b>Investments</b>								
Fixed income	\$11,873	\$11,688	\$13,573	\$12,062	\$18,117	\$19,464	\$19,215	\$18,129
Equities — Canadian	19,433	17,367	12,218	9,943	7,510	3,217	2,618	520
— Foreign	20,081	16,005	12,287	10,714	7,035	3,253	1,796	807
— Real Estate	1,561	1,272	925	694	608	451	180	—
	<b>52,948</b>	<b>46,332</b>	<b>39,003</b>	<b>33,413</b>	<b>33,270</b>	<b>26,385</b>	<b>23,809</b>	<b>19,456</b>
Receivable from Province of Ontario	1,262	1,286	1,308	1,338	1,362	1,323	1,190	945
Other assets	8,537	3,293	1,586	622	36	72	10	—
<b>Total assets</b>	<b>62,747</b>	<b>50,911</b>	<b>41,897</b>	<b>35,373</b>	<b>34,668</b>	<b>27,780</b>	<b>25,009</b>	<b>20,401</b>
<b>Liabilities</b>	<b>(8,268)</b>	<b>(3,482)</b>	<b>(1,760)</b>	<b>(879)</b>	<b>(957)</b>	<b>(7)</b>	<b>(312)</b>	<b>(277)</b>
<b>Net Assets</b>	<b>\$54,479</b>	<b>\$47,429</b>	<b>\$40,137</b>	<b>\$34,494</b>	<b>\$33,711</b>	<b>\$27,773</b>	<b>\$24,697</b>	<b>\$20,124</b>
Actuarial smoothing	(5,578)	(4,416)	(1,907)	(252)	(2,947)	(414)	(883)	709
Actuarial value of net assets	48,901	43,013	38,230	34,242	30,764	27,359	23,814	20,833
Accrued pension benefits	44,457	41,833	38,744	36,848	33,998	30,781	27,479	24,391
<b>Surplus (Deficiency)</b>	<b>\$ 4,444</b>	<b>\$ 1,180</b>	<b>\$ (514)</b>	<b>\$ (2,606)</b>	<b>\$ (3,234)</b>	<b>\$ (3,422)</b>	<b>\$ (3,665)</b>	<b>\$ (3,558)</b>
<b>PERFORMANCE (%)</b>								
Rate of return	15.6	19.0	16.9	1.7	21.7	8.9	19.6	5.6
After inflation	14.9	16.8	15.2	1.5	20.0	6.8	15.8	0.6
Benchmark	15.6	18.1	17.2	(0.3)	20.5	8.0	15.4	—
After inflation	14.9	15.9	15.5	(0.5)	18.8	5.9	11.6	—



## BOARD OF DIRECTORS

C. Edward Medland, Chair  
Jalynn H. Bennett  
Geoffrey W. Clarkson  
Ann Finlayson  
Lucy G. Greene  
Robert W. Korthals  
David J. Lennox  
Gary Porter  
Roger D. Wilson

## INVESTMENT COMMITTEE

Robert W. Korthals, Chair  
Jalynn H. Bennett  
Geoffrey W. Clarkson  
Ann Finlayson  
Lucy G. Greene  
David J. Lennox  
C. Edward Medland  
Gary Porter  
Roger D. Wilson

## AUDIT AND ACTUARIAL COMMITTEE

Jalynn H. Bennett, Chair  
Geoffrey W. Clarkson  
Ann Finlayson  
Gary Porter  
Roger D. Wilson

## BENEFITS ADJUDICATION COMMITTEE (APPEALS)

David J. Lennox, Chair  
Geoffrey W. Clarkson, Vice Chair  
Gérard Bélisle  
Bob Blackwood  
David Eaton  
Wendy Gauthier  
Sherron Hibbitt  
Shannon Hogan  
Pearse Shannon  
Cliff Whitfield  
Lorna Wilson

## CORPORATE DIRECTORY

**President and Chief Executive Officer:**  
Claude Lamoureux

**Investments:**  
Senior Vice-President, Robert Bertram

**Equities:**  
Vice-President, Heather Hunter

**Merchant Banking:**  
Vice-President, Michael Lay

**Real Estate:**  
Vice-President, Brian Muzyk

**Core Domestic:**  
Vice-President, Morgan McCague

**Core International and Fixed Income:**  
Vice-President, Neil Petroff

**Research and Economics:**  
Vice-President, Leo de Bever

**Client and Information Services:**  
Senior Vice-President, Al Reesor

**Client Services:**  
Vice-President, Rosemarie McClean

**Investment Information Services:**  
Vice-President, Russ Bruch

**Human Resources and Public Affairs:**  
Vice-President, John Brennan

**Finance:**  
Vice-President, Andrew Jones

**Law:**  
Vice-President, General Counsel and Secretary,  
Roger Barton

**Internal Audit:**  
Vice-President, Peter Maher

We welcome your comments and suggestions for this annual report, as well as other aspects of our communications program. Please call Lee Fullerton, Communications Manager at 416-730-5347.

Communications Department  
Ontario Teachers' Pension Plan Board  
5650 Yonge Street  
Toronto, Ontario M2M 4H5  
Toll-free: 1-800-668-0105  
Local: 416-226-2700





Teachers'  
Pension Plan  
Board

CARON  
DE 180  
-T11

A N N U A L

R E P O R T

1 9 9 8

Fixed Income  
Canadian  
Canadian  
U.S. equities  
Non-North American  
Real estate  
Merchandise

- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020





## CORPORATE PROFILE

THE ONTARIO TEACHERS' PENSION PLAN BOARD IS RESPONSIBLE FOR THE RETIREMENT INCOME OF APPROXIMATELY 155,000 ELEMENTARY AND SECONDARY SCHOOL TEACHERS, 67,000 RETIRED TEACHERS AND THEIR SURVIVORS, AND 90,000 FORMER TEACHERS WITH ENTITLEMENTS IN THE PLAN. THE PLAN IS SPONSORED BY A PARTNERSHIP BETWEEN THE ONTARIO GOVERNMENT AND THE PLAN MEMBERS, REPRESENTED BY THE ONTARIO TEACHERS' FEDERATION.

APPROXIMATELY 70 PERCENT OF THE PLAN'S INVESTMENT ASSETS ARE EQUITIES, SUCH AS SHARES IN PUBLIC AND PRIVATE COMPANIES, EQUITY-RETURN DERIVATIVE CONTRACTS, AND REAL ESTATE; AND 30 PERCENT ARE FIXED-INCOME SECURITIES, LARGELY FEDERAL AND ONTARIO GOVERNMENT BONDS.

AT THE END OF 1998, ACTUARIALLY ADJUSTED NET ASSETS EXCEEDED THE COST OF FUTURE PENSIONS, RESULTING IN A SURPLUS OF \$5.7 BILLION.

### Member Profile

155,000 Active Members	90,000 Former Members with money in the plan
------------------------------	--



67,000  
Pensioners



## FINANCIAL HIGHLIGHTS

in thousands of \$

### INVESTMENT PERFORMANCE

Rate of Return on Investments (%)	1998	1997
Annual	9.9%	10.0%
Composite benchmark	11.9	10.0
Long-term average	15.5	14.4
Composite benchmark	16.7	15.1

### Average annual compound rates of return (%)

	1 yr	2 yr	3 yr	4 yr	5 yr	10 yr
Company	9.0	12.7	14.7	15.7	19.4	18.0

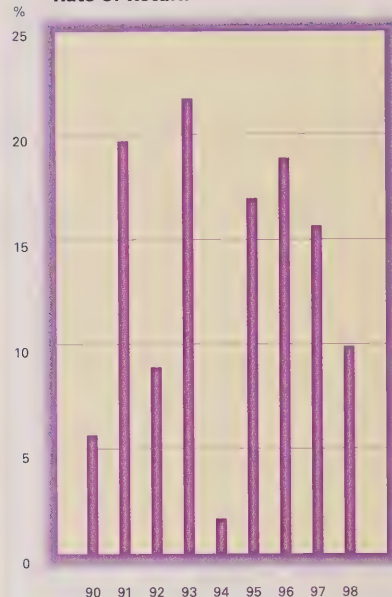
### SURPLUS

	1998	1997
Operating		
Net income	\$59.1	\$74.0
Accumulated reserve	4.3	5.6
Accumulated deferred income	54.3	48.0
Long-term investments	48.6	44.0
Surplus	\$ 5.7	\$ 1.6

\*We cannot determine the cause of the decrease in the impact of market conditions on the plan. This increase in the rates of investment return in 1998 is the result of the selected investments used in the last quarter.

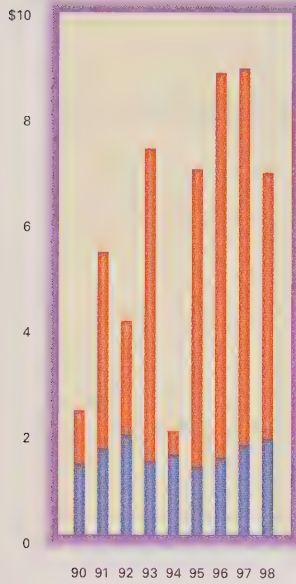
All amounts are in thousands of dollars unless otherwise indicated. All amounts are in thousands of dollars unless otherwise indicated.

Rate of Return



## Income

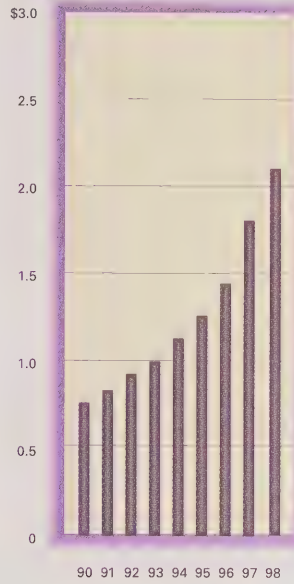
(\$ billions)



Investment Income  
Contributions

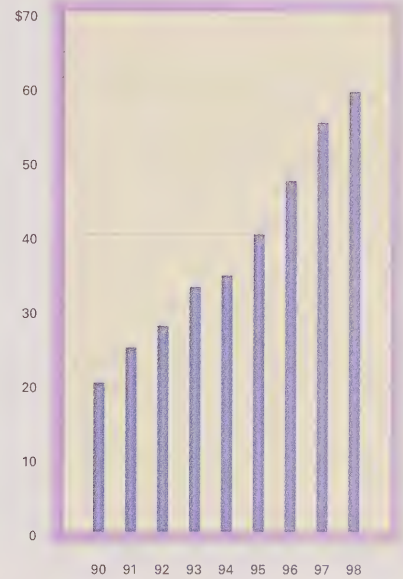
## Benefits Paid

(\$ billions)



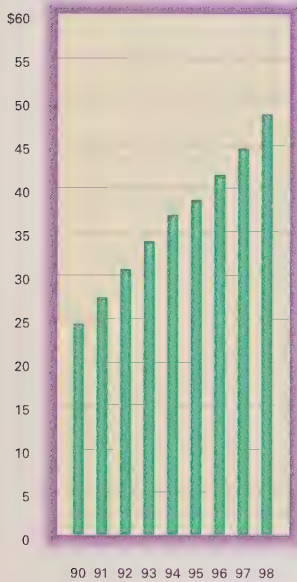
## Net Assets as at December 31

(\$ billions)



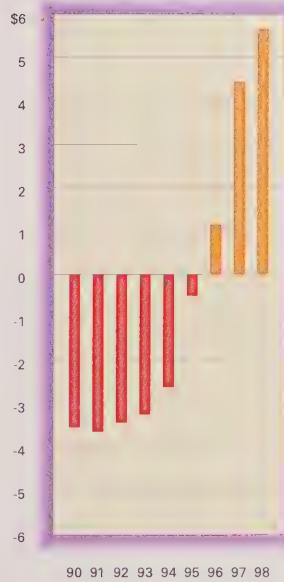
## Cost of Future Pensions as at December 31

(\$ billions)



## Surplus as at December 31

(\$ billions)



Surplus  
Deficiency



The governance, accountability and influence of pension funds are attracting increased public and political interest. This is not surprising considering they invest many bil-

lions of dollars in the capital markets and are responsible for the retirement security of many millions of Canadians. Our plan has close to 900 billion invested in stocks, bonds and real estate to ensure a steady stream of future retirement income to over 100,000 active and retired workers.

Since its inception in 1990, the pension board has believed that:

- accountability to the plan sponsors, plan members and Ontario taxpayers should be transparent, focused upon full and open disclosure;
- management should focus on maximizing investment returns to pay the pensions promised;
- influence over companies in which the plan invests should be exercised to improve long-term shareholder value; and
- the directors on the pension board should have expertise in investment and pension administration.

We are pleased that these principles were endorsed in the November 1999 report *The Governance Practices of Institutional Investors* by the Banking, Trade and Commerce

Committee, chaired by Senator Michael Kirby.

Since 1994, the pension board has complied with the Ontario Securities Commis-

sion's annual report disclosure policy for public companies, even though we have no legal obligation to do so. Four years ago, we adopted the corporate governance guidelines of The Toronto Stock Exchange for public companies. We believe that we should conform with the disclosure rules we seek to have imposed on others.

In fact, the pension board operates very much like a public company in the accountability of management to the directors, the requirements for an annual business plan and budgets, regular reviews of performance and budget variances throughout the year, pay-to-performance policies, an emphasis on maximizing returns, and providing plan members with first-rate customer service.

The Kirby committee concluded that: "The primary responsibility of members of the boards of pension funds should be to the beneficiaries of the fund. Social investment or any other form of investment must be subordinate to the long-term growth of the pension plan."

Social investing is an issue that will continue to engage debate. In our experience,





## PRESIDENT'S REPORT

The plan concluded 1998 in good financial shape. This was the third consecutive year of surplus, based on the best-estimate method of valuing the plan's year-end financial position.

However, maintaining a surplus during 1998 was a rollercoaster experience. Our asset values rose by \$6 billion in the first four months before declining on paper by about \$8 billion during the summer when investors abandoned stocks in reaction to the collapse of Asian economies. Once the initial panic subsided, values recovered and we ended the year close to \$5 billion ahead of where we started.

### 1998 YEAR-END

Net assets in 1998 were \$59.1 billion, compared with \$54.5 billion a year ago. The increase in net assets consists of contributions and investment income, from which we deduct pensions paid to members and the cost of operating the pension board.

Contributions by members and the Ontario government were much the same at \$1.3 billion as they were the previous year. The government also contributed \$492 million in special payments toward the plan's pre-1990 unfunded liability.

The accompanying chart shows how markets fluctuated wildly in 1998. Approximately 30 percent of plan assets are Canadian stocks. The TSE 300 Index on The Toronto Stock Exchange dropped by 31 percent from its high point before recovering by year end. About 20 percent of plan assets are exposed to U.S. equities. The Standard & Poor's 500 Index of widely held U.S. companies rose 23 percent by the end of July, then dropped 17 percent (in Canadian dollars) in late summer before more than recouping its losses to post a 37.7 percent return.

It should be remembered that markets are naturally volatile in the short term, with gains and losses smoothing out over many years. Furthermore, stocks are responsible for the plan's performance in recent years and represent about 70 percent of total investments.

### 1998 MARKET PERFORMANCE

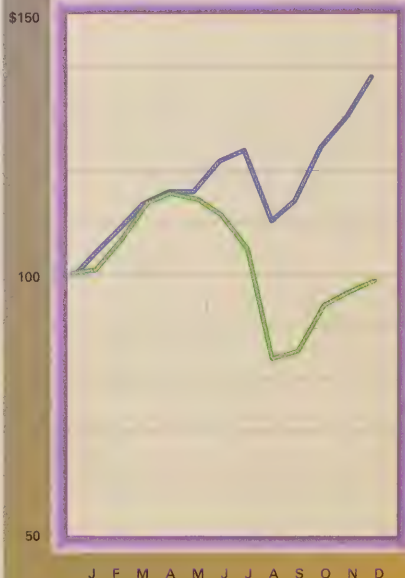
In 1998, investment income totalled \$5.1 billion, compared with \$7.2 billion in 1997. The pension plan earned a 9.9 percent rate of return in 1998, compared with 11.9 percent for our composite benchmark.

Although our performance compares well with other pension plans and mutual funds, we are disappointed that we did not meet our benchmark. It is a challenging benchmark which encourages our staff to take moderate risks while seeking new opportunities to add value.



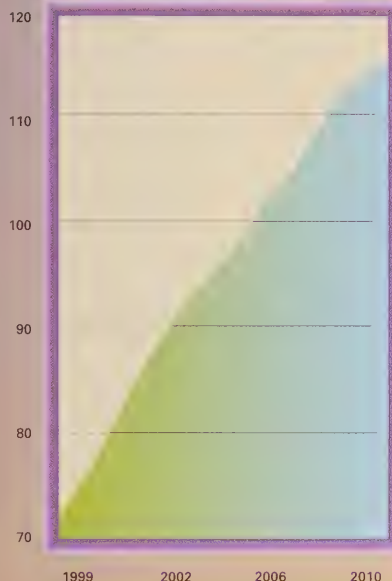
CLAUDE LAMOUREUX  
PRESIDENT AND  
CHIEF EXECUTIVE OFFICER

**1998 Market Performance**  
(\$100 invested in January)



Cdn TSE 300  
 U.S. S&P 500

**Projected Number of Pensioners**  
(thousands)



**Number of Pensioners**  
(thousands)



( Annual )  
benefit payments rose to  
\$2.1 billion.

In response to our results, we have made changes in how we manage the fixed-income portfolio; however, we are being patient with the other areas. An explanation of the difference between our performance and the benchmark is on page 18 of this report.

To keep the plan healthy, we need to earn 4.5 percent above inflation over the long term. Since the introduction of an active investment management policy in 1990, the plan has earned an average annual compounded rate of return of 13 percent, compared with the long-term investment objective (4.5 percent plus inflation) of 6.5 percent for the same period.

### CHANGES IN THE COST OF PENSIONS

On the other side of the ledger, the cost of promised pensions rose by \$4.2 billion to \$48.6 billion in 1998. One reason is the aging member population with a generation of teachers only a few years away from retirement. A second reason is the \$2 billion cost of early retirement incentives and increased pensions for retirees aged 65 and older introduced in 1998. Teachers can retire on an unreduced pension before January 1, 2003 using an 85 factor (when years of qualifying service and age equal 85) instead of a 90 factor.

In 1998, for the first time, we paid out more than \$2 billion in pension benefits and other entitlements, reflecting the growth in the pensioner population. (By contrast, we paid out \$760 million in 1990.) Specifically, pensioners, terminating members and survivors received \$2.1 billion in 1998 – a \$300 million increase over 1997.

Twice as many teachers retired in 1998 compared with the previous year, bringing the pensioner population to 67,000, a 17 percent increase over 1997. Of the 10,200 members who retired, 6,800 took advantage of the 85 factor.

In addition to paying increased benefits, the plan paid \$99 million to operate the pension board, a 10 percent increase over 1997. Administrative and investment expenses are shown on page 47.

### THE PLAN'S YEAR-END FINANCIAL POSITION

We spread the annual change in net assets over five years to level out short-term swings in values, resulting in a smoothing reserve of \$4.8 billion compared with \$5.6 billion in 1997. This is deducted from net assets to produce actuarially adjusted net assets of \$54.3 billion. Deducting the cost of future pensions from this amount leaves a surplus of \$5.7 billion in 1998. All in all, the plan is in good health with a



( *Maintaining* )  
*a surplus will be a continuing  
challenge.*

combined smoothing reserve and surplus of \$10.5 billion above the estimated cost of all future pensions.

Maintaining a surplus will be a continuing challenge. Markets have produced short-term surprises in the past two years. As we commented in last year's annual report, a market downturn could erase more than \$10 billion from asset values in one year and then take several years to recover. However, we remain confident that a strong position in stocks is the right decision for the long term.

THE VALUE OF A MODERN PENSION PLAN

Being a modern and responsive pension plan means keeping current and accurate records on each member's pension rights so that we can serve them in a timely manner with the full information they need to plan their retirement.

The work we have done in recent years in reorganizing customer service delivery, introducing new information management systems, cleaning up historical data, and training staff to best business practices, all paid off in 1998. We were able to handle 23,500 requests for pension estimates as well as 11,200 pension inception by retirees and survivors – in both cases more than twice the normal volume of business.

OUR SERVICE COMMITMENT

The success of the pension board in growing the plan's assets and providing first-rate pension services is due to the efforts of 500 employees. On behalf of the management team and all the directors, I thank them for their dedication and enthusiasm in once again ensuring we did the best job possible for the teachers of Ontario.

*C. Lamoureux*

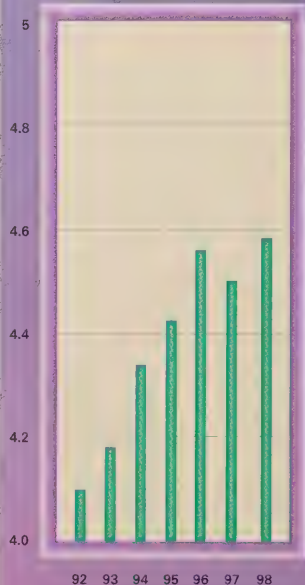
CLAUDE LAMOUREUX  
PRESIDENT AND CHIEF EXECUTIVE OFFICER

**Increased Work  
Volumes**  
as at December 31

(thousands)



**Quality Service Index**  
(how teachers rate our service)

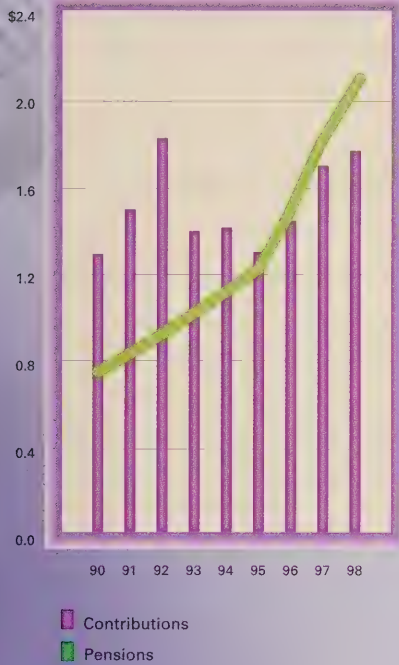


The yearly average of  
client satisfaction on a  
scale of 1 to 5

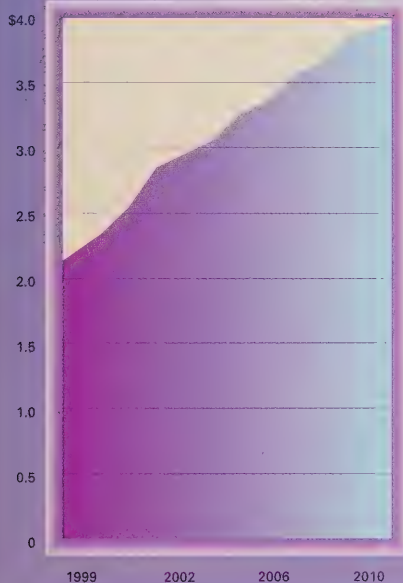


## MANAGEMENT'S DISCUSSION AND ANALYSIS

**Contributions vs Pensions**  
(\$ billions)



**Projected Annual Pensions**  
(\$ billions)



This section of the annual report elaborates on the information contained in the audited financial statements to assist readers in viewing the plan's financial position and performance through the eyes of management.

### PENSION PLAN OBJECTIVES

The plan is required to deliver defined benefits to Ontario's teachers during their retirement years. To meet these obligations, and based on the current contribution rates of members and the Ontario government, the plan needs to earn an annual rate of return of 4.5 percent above inflation over the long term. In practice, the plan's assets are managed to earn a higher rate of return at moderate risk and to achieve a surplus of assets over liabilities. A surplus provides a cushion against a severe decline in asset values or a sharp increase in liabilities as a result of volatile markets or increases in long-term inflation. Since implementing an active investment policy in 1990, the plan first achieved a surplus in 1996.

**Contribution rates** Adding value substantially above the 4.5 percent real rate of return should minimize the risk of a contribution increase and make it possible to reduce contributions or enhance benefits over the long term. Ontario teachers currently contribute to the plan 7.3 percent of the first \$37,400 of salary and 8.9 percent on remaining salary. The Ontario government and designated private schools and organizations match these contributions. At least every three years, the independent actuary retained by the pension board determines the level of contributions appropriate to fully fund the benefits promised to members. Four reviews have been completed since 1990 and contribution rates have remained unchanged.

### YEAR-END FINANCIAL POSITION

The value of the plan's accrued pension benefits increased from \$44.5 billion to \$48.6 billion during 1998. The actuarial assumptions used to determine these costs reflect management's best estimate of expected long-term trends in investment returns, teachers' salaries, inflation and demographic factors. The main assumptions are set out on page 23.

**Benefit payments** In 1998, the plan paid \$2.1 billion in benefits, an increase of \$300 million over the previous year. The increase in total

( The plan has )  
a surplus of \$5.7 billion.

payments principally reflected 10,800 teachers starting on pension, or twice the 1997 level, bringing to 67,000 the number of retired members and their survivors receiving benefits. The 1998 payments reflected \$206 million in commuted value transfers, a 90 percent increase over 1997, and a 1.9 percent cost-of-living adjustment for pensions. The inflation adjustment for January 1999 was 0.9 percent.

**Change in net assets** The plan began 1998 with \$54.5 billion in net assets available for benefits. Income of \$6.9 billion consisted of \$5.1 billion from investments, compared with \$7.2 billion in 1997, and \$1.8 billion from contributions, compared with \$1.7 billion a year earlier. Teachers and the government made regular contributions of \$1.3 billion in 1998 and the government made special payments of \$492 million toward the pre-1990 unfunded liability.

On the expense side, benefits paid to members and survivors totalled \$2.1 billion. In addition, the cost of operating the pension board was \$99 million.

As a result of these changes, net assets available for benefits grew by \$4.7 billion to \$59.1 billion at the 1998 year end.

**Surplus** The plan had a surplus of \$5.7 billion at December 31, 1998, compared with \$4.4 billion a year earlier. Before calculating the surplus, net asset gains higher than the actuarial assumptions are amortized over five years to smooth out the impact of one-year changes in values. Any loss in net assets below the actuarial assumptions are similarly amortized. The smoothing is intended to provide a more realistic relationship between assets and future liabilities. Before smoothing, the surplus of net assets over the cost of future pensions was \$10.5 billion.

#### THE ASSET AND LIABILITIES

To ensure financial viability, we determine the asset mix appropriate for the size and structure of the plan's liabilities.

**Liabilities** Pension benefits, which will be paid out over several decades, are affected by many long-term economic, investment and demographic factors. While not a recent issue, inflation is one of the most important long-term concerns and is influenced by interest rates. Teachers' pensions

#### CHANGES IN NET ASSETS

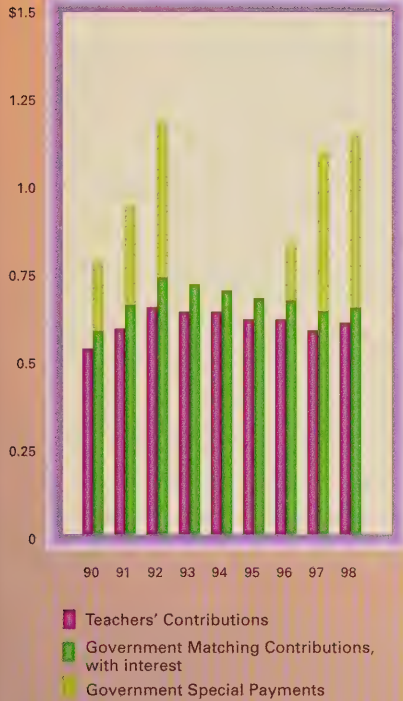
(\$ Millions)	1998	1997
<b>Income</b>		
Investment income	\$5,137	\$7,246
Contributions	1,757	1,696
	<b>6,894</b>	<b>8,942</b>
<b>Expenditures</b>		
Benefits	2,103	1,802
Operating expenses		
Client services	32	31
Investments	67	59
	<b>2,202</b>	<b>1,892</b>
<b>Increase in net assets</b>	<b>\$4,692</b>	<b>\$7,050</b>

#### ACCRUED PENSION BENEFITS

(\$ Billions)	1998	1997
Accrued pension benefits, beginning of year	<b>\$44.5</b>	<b>\$41.8</b>
Interest on accrued pension benefits	3.4	3.4
Benefits earned	1.3	1.2
Benefits paid	(2.1)	(1.8)
	<b>47.1</b>	<b>44.6</b>
Changes in actuarial assumptions	0.2	0.7
Plan changes	2.0	—
Experience gains	(0.7)	(0.8)
Accrued pension benefits, end of year	<b>\$48.6</b>	<b>\$44.5</b>

( We adjusted the )  
asset-mix policy to 70% equities  
and 30% fixed income.

**Contributions**  
(\$ billions)



**Asset-Mix Policy**



are indexed to the Consumer Price Index. The value of liabilities increases when interest rates go down and decreases when rates go up.

If we were able to invest only in bonds that earn real rates of return (that is, adjusted for inflation), we could substantially reduce the surplus risk, but most likely, the returns would be low and contributions would need to be higher. Only about five percent of the plan's assets produce real rate returns because there is an insufficient supply of this investment product. On the other hand, if we focused only on earning the highest rates of return, results would be more volatile and the risk of having to raise contribution rates in any given year would be greater, although average contributions might be lower.

Our goal is to select an asset mix that balances risks and rewards, avoids excessive volatility, and maintains stable contribution rates.

**Asset mix** The asset-mix policy is reviewed annually by management and the board of directors and changes are made as necessary. The asset mix is crucial to long-term performance because more than 80 percent of the total investment returns depend on the asset mix selected.

In May 1998, we adjusted the asset-mix policy to 70 percent equities, including real estate, and 30 percent fixed-income securities. Previously, the asset-mix policy had been 75 percent equities.

The equity exposure was reduced following the partners' agreement in April 1998 to use current and future actuarial gains to eliminate the \$8.4 billion owed by the Ontario government in special payments. These payments were to pay off the unfunded liability that existed prior to 1990. In setting the original asset-mix policy, we treated these special payments as an asset for the funding valuation. Elimination of the payments, discussed in the section "Use of Actuarial Gains" on page 23, removed a large asset that was equivalent in investment terms to a real-rate bond.

We believe the current asset-mix policy has a high probability of ensuring investment assets grow at least as fast as the liabilities over the long term.

**Matching** Both assets and liabilities are sensitive to interest rates. One way to measure this is a concept called duration. Research indicates that a one percent change in interest rates is expected to produce a 15 percent change in the value of equities. This translates into a duration of 15 years for equities. When our fixed-income investments are combined with equities, total assets have an average duration of 13 years. A one percent change



( We generated 67% )  
of income from outside Canada.

in interest rates normally affects our pension liabilities by 16 percent, for a 16-year duration. The better matching of assets to liabilities reduces, though it does not eliminate, the risk that a drop in real return interest rates increases the value of liabilities more than assets.

**Adding value** We actively manage as much of the fund as possible to create extra value. We also attempt to enhance performance by macro-managing the total fund through "overlay" programs. For example, the long-term asset-mix policy allows equities to vary between 60 and 80 percent of total assets. We also set asset-mix ratios for Canada, the United States and non-North America. These ratios are increased or decreased within preset ranges to take advantage of opportunities.

Another overlay program partially hedges the fund's exposure to foreign currencies. When we invest abroad, we earn a return on the investment and incur a gain or loss as a result of currency fluctuations. To reduce the volatility of returns resulting from currency fluctuations, we hedge 50 percent of investments in major foreign currencies based on policy weights.

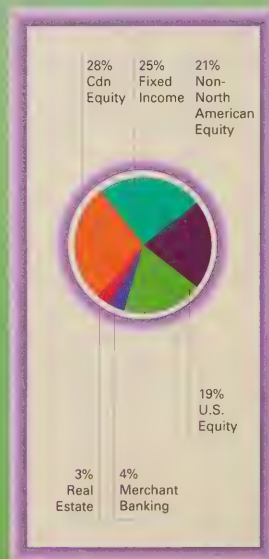
#### INVESTMENT MANDATE

Our investment policy is expressed in a document entitled *Statement of Investment Policies and Goals*, which is reviewed annually by the board of directors and filed with the Financial Services Commission of Ontario.

Legislation requires us to "exercise the care, diligence and skill in the administration and investment of the pension fund that a person of ordinary prudence would exercise in dealing with the property of another" (subsection 22 (1) *Pension Benefits Act, (Ontario)*). Under the "prudent person" rule, we are expected to consider every type of investment product that would be appropriate for a modern investment portfolio. The investment staff's authority to invest in any particular product is set out in the *Statement of Investment Policies and Goals*.

**Investment choices** We invest in stock indices, individual company shares, derivative contracts, income-producing real estate, Ontario debentures, government and corporate bonds, real-rate securities, a commodities index, and money market securities. At year end, 83 percent of underlying assets were in Canada although we generated 67 percent of income from outside the country through the use of derivatives and cash investments.

**Asset Mix**  
as at December 31, 1998





**Effect of  
Derivatives**  
as at December 31, 1998

(\$ billions)



( We had \$28.5 billion )  
invested in Canadian and foreign  
stock index portfolios.

**Use of derivatives** We use derivative contracts, such as swaps, futures, forwards and options, to manage interest rate volatility and foreign currency exposure as well as to achieve our asset mix and improve overall returns.

In the early 1990s, when the plan's assets were almost exclusively non-marketable Ontario debentures, we primarily used derivatives to shift the asset-mix from fixed-income returns to equity returns. At the 1998 year end, we had exchanged fixed-rate interest on \$7.1 billion of debentures for equity returns using interest-rate and equity swaps. These positions are summarized in note 2b to the financial statements. We do not assume additional equity market risk by using equity swaps compared with making direct cash investments in equities.

Derivatives provide flexibility in implementing our investment strategy. For example, it is more efficient to acquire a return on a market index, such as the Standard & Poor's 500 on the New York Stock Exchange or the FTSE 100 index on the London Stock Exchange, using equity swaps than by purchasing stocks of the individual companies included in the index.

As part of our risk management, derivatives are marked to market daily and are supported by appropriate underlying assets. The effects of derivatives are included in the value of the various asset classes.

## EQUITY INVESTMENTS

Equities totalled \$43.2 billion at the end of 1998, compared with \$40.6 billion a year earlier. The chart on page 15 shows the composition of the equity portfolio. Approximately \$10.9 billion, or 25 percent, of equity exposure is in the form of equity swaps, compared with \$11.8 billion, or 29 percent, in 1997.

**Stock index portfolios** At year end, we had \$28.5 billion invested in Canadian and foreign stock index portfolios. These portfolios are expected to match the performance of the index less transaction and management costs. As one of the largest portfolio managers in Canada, we take care in our buy and sell decisions not to disrupt the market or signal our intended actions. This is done through block trading for large transactions in particular stocks, and through basket trading for groups of different stocks in a single transaction.

( 95 % of our )  
foreign stock index funds  
were derivatives.

We manage \$12.9 billion in our Canadian index portfolios that contain the shares of corporations listed in the TSE 300 index. This was a \$2.6 billion decrease from 1997, principally due to the reduced equity component in the total fund asset-mix policy discussed earlier. These index funds represent about three percent of the outstanding float of the TSE 300 index. To improve returns above the market benchmark, we have developed quantitative portfolios that invest in TSE 300 stocks based on models that attempt to identify strategies and stocks that should outperform the index. Starting in 1999, we will also invest in the new S&P/TSE 60 index.

Our foreign stock index funds totalled \$15.6 billion at the end of 1998. Approximately 95 percent of these investments were through derivative contracts and the remainder were corporate shares. The derivative investments are primarily implemented by staff specialists who generally exchange the fixed-interest income from Ontario debentures for floating rate interest and then exchange these floating cash flows for equity returns in the United States and overseas. At the 1998 year end, we had exchanged \$4.8 billion of floating rate interest for returns on U.S. equities in the Standard & Poor's 500 index and \$5.5 billion for returns on equity indices in Europe, Australia and the Far East. These investments were worth \$8.0 billion and \$6.7 billion respectively at year end.

Non-North American equity swaps were contracted principally in Japan, the United Kingdom and continental Europe.

**Actively managed stock portfolios** We actively manage a \$3.0 billion portfolio of Canadian stocks and \$7.1 billion of foreign stocks. The Canadian portfolio is primarily managed internally while foreign stocks are selected by external fund managers familiar with U.S., European and Asian companies.

The search for value is the most important principle behind our managed investment approach. We select the shares of companies that are considered to be undervalued. We analyze each company's financial performance, operations, industry position, management quality, long-term business plan, board structure and board independence. The best investment opportunities often occur when the outlook for a particular industry or company is negative. Conversely, the best divestment opportunities often occur when optimism is pervasive.

#### INVESTMENTS BY PORTFOLIO

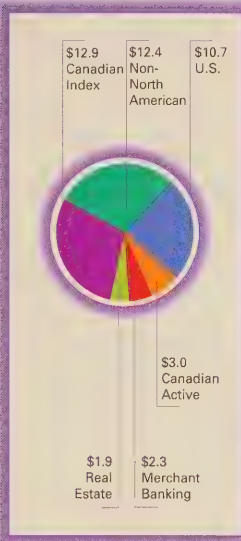
(\$ Billions)	1998	1997
Fixed income	\$14.9	\$12.3
Canadian active equity	3.0	2.5
Canadian index equity	12.9	15.5
U.S. equity	10.7	8.6
Non-North American equity	12.4	10.7
Real estate properties	1.9	1.6
Merchant banking	2.3	1.7
	\$58.1	\$52.9

#### Foreign Equities as at December 31, 1998



**Equity Portfolio**  
as at December 31, 1998

(\$ billions)



( We are a patient )  
investor looking for good  
long-term investments.

Our Canadian stock portfolio includes investments managed by an external fund manager who identifies undervalued companies where shareholder value can be improved through the participation of an experienced investor owning a large block of shares. The manager votes the shares on our behalf.

Our foreign stock portfolio continued to be overweighted in Europe and underweighted in Japan, where the local market had negative returns. The emerging markets of Asia, Latin America, and Central and Eastern Europe represent about one percent of total investments.

**Merchant banking** Our \$2.3 billion merchant banking portfolio is one of the largest in Canada. At the 1998 year end, the portfolio contained 58 investments of which 60 percent were direct and the remainder were made with partners. Approximately 60 percent of merchant banking investments were in Canadian companies, principally private firms. Our merchant banking investments outside Canada are mostly in the United States and Europe.

Traditionally, we have made equity investments in larger private companies and select public companies. In 1998, we expanded our strategy by offering mezzanine debt in addition to equity capital.

In addition, in late 1997 we allocated \$100 million for investment in early stage enterprises in Canada and, to date, have invested or committed \$60 million.

We are a patient investor looking for good long-term returns at least two percentage points higher than the TSE 300 index, a target we have exceeded consistently with our merchant banking assets over the past eight years. Our current investments include telecommunications, manufacturing, media, entertainment, consumer products, and oil and gas firms.

**Real estate** We own \$2.3 billion in real estate, which consists of approximately \$1.6 billion in directly owned properties and \$700 million of equity in real estate companies and investment funds. The \$1.9 billion portfolio is net of \$374 million of mortgages on properties in which we have a direct equity ownership.

We invest directly in office buildings and regional shopping centres in Canada. During 1998, we acquired a 50 percent interest in a Calgary office tower and sold our industrial portfolio and our interest in a Toronto office

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( *In 1998, we started* )  
*to invest in real estate*  
*outside Canada.*

---

complex. We also initiated the \$120 million reconfiguration and upgrade of Calgary's Chinook Centre, the largest shopping centre redevelopment project in Canada. Our property portfolio is itemized on page 59.

Our real estate strategy is driven by partnerships with property management and property investment specialists. In North America, we take equity positions in select real estate companies and then invest in properties on a joint basis with them. Our equity in Cadillac Fairview Corporation, one of Canada's largest real estate companies, represents about 20 percent of our real estate portfolio.

In 1998 we invested US\$75 million in U.S. real estate investment trusts and acquired 10 percent of The Macerich Company for US\$150 million. Based in Santa Monica, California, Macerich is a real estate investment trust involved in the acquisition and redevelopment of regional malls. After year end, we invested US\$75 million in a portfolio of four large regional shopping centres and an office complex in Oregon and Washington State in joint ownership with Macerich.

Outside North America, we have committed US\$400 million to three investment funds that enable us to participate in property opportunities in major developed and emerging markets around the world.

**Commodities** Commodities help to diversify the risk of the total fund. They appreciate in value with inflation, and act as a hedge against the value of the plan's liabilities. At year end, the plan had \$398 million invested through derivatives in the Goldman Sachs commodity index.

**Proxy voting** We exercise corporate ownership by voting on management proxy proposals according to their likely impact on shareholder value and long-term investment returns.

A major concern is the trend toward granting excessive employee stock options that dilute the value of our equity investments. During the past year, we voted against 125 of 170 resolutions involving stock options, more than half of which would dilute the number of shares by over 10 percent and, in some cases, by more than 15 percent. In general, we have continued to oppose most plans that potentially dilute the outstanding shares by more than five percent. We strongly favour option plans that have performance features.

We also opposed 34 proposals putting forward shareholder rights plans. These plans allow a company to issue a large number of additional



( Long-term )  
government and corporate bonds  
give stability to our asset mix.

shares as a means of discouraging hostile takeover bids. We believe that the shareholders should have an unfettered right to decide to whom to sell their shares and at what price.

#### FIXED-INCOME INVESTMENTS

Fixed-income securities totalled \$14.9 billion at the end of 1998, compared with \$12.3 billion a year earlier. The increase is the result of the change in asset-mix policy discussed earlier. The composition of the fixed-income portfolio is shown in the chart on this page.

**Debenture portfolio** The largest component of the fixed-income portfolio is \$8.3 billion of non-marketable Ontario debentures, after the effect of derivative swaps. The debentures before the effect of derivatives are detailed on page 55.

The debentures are managed to behave as much as possible like our liabilities in response to changes in interest rates. Because the duration of our assets is shorter than our obligation to pay future benefits, we changed our debenture policy in 1996 to extend duration from four years, at that time, to seven years in 1997, and nine years in 1998. This portfolio is maturing at the rate of more than \$1 billion annually.

**Bond portfolio** The \$3.6 billion marketable bond portfolio consists of Government of Canada bonds, global bonds, corporate bonds (including convertible bonds and high-yield unsecured notes) and money market securities.

Historically, we have managed the bond portfolio relative to the benchmark by trading in anticipation of interest rate changes. Now that our debenture portfolio is maturing, we are investing new funds in bonds to maintain our asset mix policy of 30 percent fixed-income securities. In the absence of inflation, long-term government and corporate bonds give stability to our asset mix. In the future, more than half the marketable bond portfolio will be index invested rather than actively traded.

**Real-rate investments** Real-rate investments are an excellent match for our liabilities, which are pensions indexed to inflation. They are risk free with respect to inflation and are guaranteed by governments. The value of our holdings of real-rate bonds grew by \$1.4 billion in 1998 to \$2.8 billion.

**Fixed Income**  
as at December 31, 1998  
(\$ billions)



( *We actively manage* )  
*much of the fund to create*  
*extra value.*

We also own \$219 million of index-linked mortgages. These securities earned a real rate of return of 4.4 percent.

#### INVESTMENT PERFORMANCE

Net investments increased to \$58.1 billion in 1998, compared with \$52.9 billion at the end of 1997.

**1998 fund performance** During a year of exceptional volatility in stock markets, the fund achieved a 9.9 percent rate of return in 1998, compared with 15.6 percent the prior year. The 1998 return compared with 11.9 percent for the total fund benchmark. After inflation, the return was 8.9 percent, compared with 14.9 percent in 1997. Our performance continues to be driven by the asset-mix weighting in U.S. and European equities.

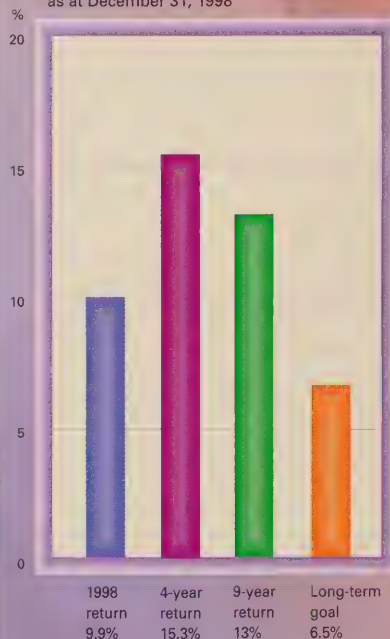
**Four-year returns** A longer term measure has greater relevance, greater reliability, and lower volatility than a measured one-year performance. A common standard within the pension fund industry is to calculate average performance on a four-year cycle. Over the past four years, the fund's average annual performance was 15.3 percent. The real rate of return (after inflation) was 13.9 percent and well in excess of the plan's objective of 4.5 percent on average over the long term.

The plan now has a history of performance with an average annual compounded rate of return of 13 percent over nine years of active investing, well above the long-term goal (4.5 percent plus inflation) of 6.5 percent.

**Performance vs. benchmarks** The performance of all portfolios is measured against market benchmarks. The amount by which we exceed market averages is the value that active management adds to each portfolio. The performance of our main investment portfolios versus their benchmarks is shown on page 19.

In some cases, the benchmark is not a perfect match. For example, the real estate portfolio is measured against the Frank Russell Canada Property Index, which tracks the change in value of "bricks and mortar" investments. Our portfolio includes shares in publicly traded real estate companies. The change in value of these stocks can deviate dramatically from the values applied to buildings. Another example is merchant banking,

**Performance**  
Compared to long-term goal  
of 4.5% plus inflation  
as at December 31, 1998



( Our rate of return )  
 averaged 15.3% over  
 the last four years.

#### MEASURING OUR PERFORMANCE

Investment	Benchmark
Canadian equity	TSE 300
U.S. equity	S&P 500
Non-North American equity	EAFE index
Real estate	Frank Russell Canada Property Index
Bonds	Scotia Capital Market Universe Bond Index

which includes non-Canadian holdings, although the portfolio is measured against the TSE 300 index plus two percentage points. Despite these differences, we believe our results will be better than the benchmarks over the long term and our managers accept them as performance targets.

Total fund return is measured against an aggregate benchmark of returns for each asset class benchmark, using our asset-mix policy weights. This aggregate benchmark reflects the ideal proportionate amount of risk we are prepared to assume by asset class and geographic market (Canada, U.S., and non-North America). We are conscious that the range of performance around the benchmark can be plus or minus 3 percent on a one year basis and 1.5 percent over four years.

However, we are disappointed that we underperformed the total fund benchmark by 2 percent in 1998.

For only the second time in eight years, our overseas fund managers collectively underperformed the EAFE Index (Europe, Australia and the Far East). The index does not include investments in emerging markets, although the broad mandate of our managers does. Our emerging markets investments outperformed their benchmarks, but significantly underperformed the EAFE benchmark in 1998.

Our active U.S. equity fund manager has a strategic mandate to invest in companies with small to medium capitalizations. This portfolio has traditionally been measured against the S&P 500 Index of large cap companies. We still believe small to medium cap firms hold the prospect of exceptional long-term returns. Because of our ability to take a long-term view, we can withstand the volatility of this market segment, which significantly underperformed the S&P 500 Index in 1998.

The actively managed portion of our fixed-income portfolio was below the benchmark. To reduce the volatility of returns, we have increased the proportion of the fixed-income portfolio invested passively in debenture and long-bond indices and continue to monitor results closely. Our overall fixed-income returns, including the returns on the passive funds, compared favourably to industry averages.

The extreme volatility in the market made it very difficult to track the asset-mix policy weights. Being underweight in asset classes that performed extremely well reduced the total fund return measured against the benchmark. The real estate portfolio, for example, was below its weighting all year because of our inability to find investment opportunities at acceptable values.

#### RATE OF RETURN COMPARED TO BENCHMARK

	1998	Benchmark
Fixed income	9.2%	10.6%
Canadian active equity	-0.7	-1.6
Canadian index equity	-0.9	-1.6
U.S. equity	33.5	37.7
Non-North American equity	24.9	29.6
Real estate	5.3	18.0
Merchant banking	12.3	0.4
Overall	9.9%	11.9%

#### 4-YEAR AVERAGE RATE OF RETURN COMPARED TO BENCHMARK

	4-year average	Benchmark
Overall	15.3%	15.7%

( *Investment costs* )  
were 12 cents for each \$100  
of assets.

In addition, real estate underperformed its benchmark because the portfolio included shares of publicly traded real estate companies. Cadillac Fairview shares, for example, declined by 15 percent during the year.

Several portfolios performed better than their benchmarks, notably internally managed Canadian equities, Canadian stock index funds, and merchant banking. The total fund return was enhanced by our tactical asset allocation program of selecting countries we believe are likely to have the most positive returns and using futures contracts to invest in those markets.

Based on surveys of performance by Canadian pension funds, our 1998 results were in the top 25 percent of pension funds and substantially better than Canadian balanced mutual funds.

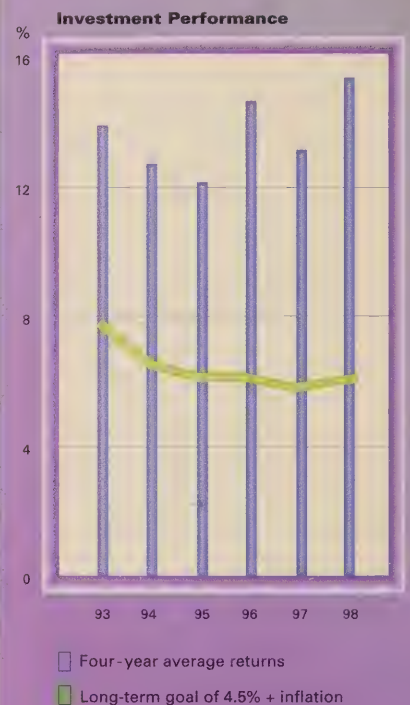
#### *Investment Management*

Market risk is managed through the appropriate choice of asset mix. We monitor and measure this risk on a daily basis using a "Value at Risk" system. Active management risk relative to the benchmark is budgeted and limits are set through formal policies and procedures. We also measure the impact of changes in interest rates and other factors on the plan's financial position by using models to match the risks between assets and liabilities. Among the most important risks are asset/liability matching (discussed earlier), stock market and interest rate volatility, and liquidity, credit, and foreign exchange risks.

**Interest rate volatility** Pension liabilities are sensitive to changes in management's expectations of long-term investment returns, rates of inflation and growth in teachers' salaries. Assets are affected by short-term changes in nominal interest rates and equity markets (see note 2d). Declining real rates of return over many years could, for example, put pressure on the contribution rates required to meet pension obligations. Conversely, sustained increases in real rates would have the opposite effect.

**Stock market volatility** Having large stock portfolios exposes the fund to market volatility. However, in the long-term, this volatility is reduced substantially.

North American stock markets have experienced a negative return about once in every five years. In 1998, the Canadian and U.S. markets had





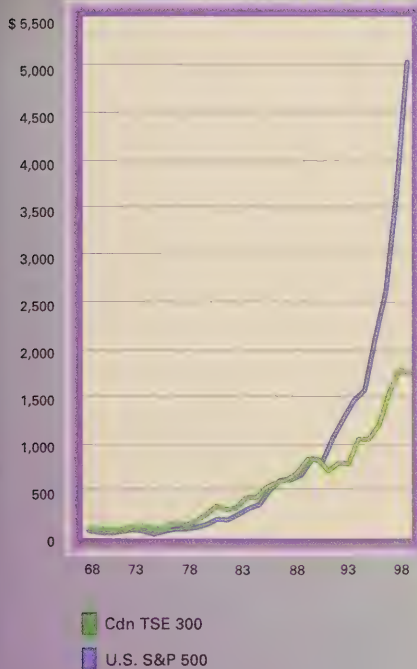
( It is difficult for )  
a large fund to move in and out of the market  
efficiently to avoid a correction.

major corrections. The U.S. market recovered fully, and the Canadian market partially, by year end to values that continue to be high by historical standards. It is difficult for a large fund to move in and out of the market efficiently to avoid a correction. The shares of many leading Canadian corporations are closely owned. Control blocks of shares represent approximately 23 percent of the market value of TSE 300 companies on the Toronto Stock Exchange, leaving an available capitalization of \$550 billion for investors seeking equity opportunities. With \$17.6 billion invested in Canadian stocks, this is a significant concern for us.

Part of our risk management strategy is to reduce dependence on the Canadian economy by diversifying globally through foreign stock purchases and equity derivative contracts.

Overall, Canada remains our primary equity market, where we had \$17.6 billion invested in equities in 1998, followed by \$11.5 billion in the United States, \$2.6 billion in Britain, and \$2.3 billion in Japan.

**30-Year Market Performance**  
(value of \$100 invested in 1968)



**Liquidity risk** After payment of pension benefits and operating costs, the increase in net assets available for benefits totalled \$4.7 billion in 1998. Cash flow came from investment income (dividends, interest income and realized capital gains) and contributions.

The cash needs for pension payments and operating expenses are predictable. On the investment side, our major liquidity risk is associated with our portfolio of equity derivative contracts. These contracts are often long term. To reduce credit risk, unrealized gains and losses are exchanged with our counterparties every three to six months. A drop in foreign equity markets which is sustained for more than three months would require us to transfer cash collateral. We regularly assess the fund's ability to withstand the liquidity effects of a catastrophic 25 percent drop in all markets. Because the equity contracts have been profitable, we currently hold a large amount of collateral from counterparties. This cash collateral, along with marketable short-term securities, annual cash flow, and other liquid assets, is more than sufficient to cover the fund's liquidity risk.

**Credit risk** Every time we make an investment we are exposed to credit risk in the event a security issuer defaults on payments or becomes insolvent. Credit risk exists with security issuers, such as governments and corporations, as well as with counterparties, such as financial institutions and investment dealers with whom we have investment contracts.

( There are two )  
*actuarial valuations: best estimate  
 and funding.*

The largest credit exposure, as discussed in note 2e to the financial statements, is with the Province of Ontario through the non-marketable debentures valued at \$18.9 billion. The Province also owes \$1.2 billion in contributions receivable.

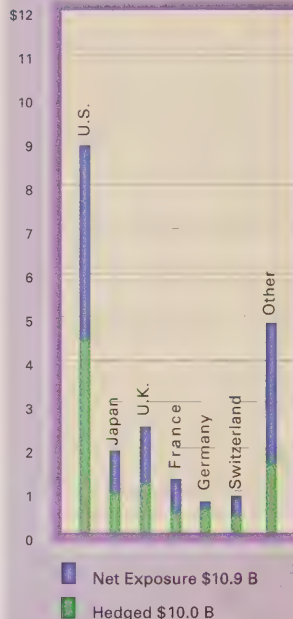
In the case of security issuers and derivative counterparties, we continuously monitor credit risk and, depending on the credit rating, restrict debt and equity investment in a single corporation or financial institution to between one and three percent of total fund assets.

In the case of swap counterparties, we deal primarily with 19 financial institutions that are rated Single A or better. Unrealized gains and losses on equity swaps are exchanged every three to six months. We exchange cash flows and settle interest rate swaps every six months, reducing the potential impact of a counterparty defaulting on its contractual obligations.

**Foreign currency risk** When we make foreign investments, changes in the relative value of the Canadian dollar can add to, or subtract from, our returns. We hedge 50 percent of our foreign equity exposure primarily in the currencies of Europe, the United Kingdom, the United States and Japan. This reduces overall asset volatility and permits flexibility in managing foreign exchange movements. We had \$10.0 billion of foreign currency hedges in place at the 1998 year end.

**Currency Exposure**  
 as at December 31, 1998

(\$ billions)



**ACTUARIAL VALUATIONS**

Two main valuations determine the plan's financial health. The best estimate valuation is a view of the year-end position. The statutory funding valuation, calculated at least every three years, is a more conservative view of the contributions needed to fund the plan over the long term.

The value of assets, as the accompanying table illustrates, is the same for both. However, liabilities are treated differently:

- The best estimate approach values the pension benefits earned, or accrued, at year end.
- The funding valuation estimates the value of future benefits over the lifetime of all current members. It also includes the present value of future contributions.

The result is two different numbers for two different purposes. The funding valuation is used to determine the gains or losses available for the partners to share.

**COMPARING THE VALUATIONS**

(\$ Billions)	Best estimate at Dec. 31, 1998	Funding at Jan. 1, 1999
Net assets	\$59.1	\$59.1
Smoothing reserve	4.8	5.1
Value of assets	54.3	54.0
Future contributions	—	12.0
Special payments	—	3.7
Total assets	54.3	69.7
Cost of future pensions	48.6	66.2
Surplus/Gain	\$ 5.7	\$ 3.5

( *The plan has gone* )  
*from a large unfunded liability in 1990*  
*to a series of gains.*

Underlying both valuations are certain economic and demographic assumptions. The three most important are future investment returns, salary changes, and inflation. Salary changes affect the future value of liabilities because pension calculations are based on each member's best five years of earnings. Teachers' pensions are fully indexed against inflation, which increases future liabilities. The assumptions for the valuations are shown in the accompanying table.

More important than the accuracy of each assumption is the relationship between investment returns and inflation, and salary changes and inflation. The funding valuation assumes that, over the long term, teachers' salaries will exceed inflation by one percentage point and investment returns will exceed inflation by four percentage points. (The investment assumption for funding purposes is more conservative than the board's investment objective of exceeding inflation by 4.5 percent).

#### USE OF ACTUARIAL GAINS

During the past nine years, the pension board has made long-term strategic decisions that have resulted in substantial increases in asset values as a result of strong stock and bond markets. An asset mix with a high ratio of equities to fixed-income securities coincided with the longest bull stock market in the 20th century. Derivative and cash investments allow the plan to earn returns from the U.S. and overseas, where markets have performed much better than in Canada.

In the same period, unusually low inflation and generally modest changes in teachers' salaries reduced the growth of future liabilities.

As a result, the plan has gone from a large unfunded liability in 1990 to a series of gains that have made it possible for the OTF and the Ontario government to improve benefits and, after April 1999, to eliminate the special payments by the Ontario government to pay for the initial unfunded liability. This section of the annual report chronicles the progress of the plan from a loss to recurring gains based on the funding valuation.

**1990 valuation** On January 1, 1990, the plan's long-term liabilities exceeded the market value of assets by \$7.8 billion. Future pensions were only 81 percent funded.

The unfunded liability arose primarily because contributions and investments prior to 1990 were insufficient to support promised benefits,

#### FUNDING VALUATION ASSUMPTIONS

(at January 1) (%)	1999	1998	1996	1993	1990
Rate of return	7.5	7.5	8.0	8.0	8.5
Salary escalation	4.5 <sup>2</sup>	4.5 <sup>1</sup>	5.0	5.0 <sup>1</sup>	5.75
Inflation rates	3.5 <sup>3</sup>	3.5 <sup>1</sup>	4.0	4.0 <sup>1</sup>	4.5

<sup>1</sup>except 2% for 2 years

<sup>2</sup>except 2% for 2 years, 3.25% for 1 year

<sup>3</sup>except 2% for 2 years, 2.75% for 1 year

#### BEST ESTIMATE VALUATION ASSUMPTIONS

(at December 31)	1998	1997
Rate of return	7.25%	7.75%
Salary escalation	3.50	4.00
Inflation	2.50	3.00

( The OTF and )  
 Ontario government jointly decide  
 how to spend the gains.

particularly after 1976 when pensions were fully indexed against inflation. In the late 1970s and most of the 1980s, high inflation increased the cost of benefits at a faster rate than the increase in asset values. At that time, the assets were entirely Ontario debentures.

The Ontario government agreed to pay the initial unfunded liability through a series of special payments from 1990 to 2029. The contribution rate for plan members was also increased by one percentage point to 8.9 percent of teachers' salaries, matched by the government.

In 1990, the pension board began to pursue an active investment policy so that the income and value growth from assets such as stocks, bonds and real estate, could reduce the costs of providing pension benefits.

*By treating the special payments owed by the province as an asset in the funding valuation, the plan's assets matched liabilities.*

**1993 valuation** By January 1, 1993, asset values grew by 62.5 percent, and the plan had diversified into stocks, bonds and real estate. These assets collectively earned an average annual rate of return of 11.2 percent over the first three years of the active investment program. Between 1990 and 1992, the Ontario government also paid \$895 million in special payments toward the pre-1990 unfunded liability.

By the time the 1993 valuation was made, the government and the Ontario Teachers' Federation had become co-sponsors of the plan. The assumptions for valuing liabilities were adjusted to reflect the reality of low inflation and modest salary increases. This adjustment produced a \$1.5 billion actuarial gain. The partners agreed that the government would take the gain and count it against cuts that would otherwise have to be made in

**How the gains were used**  
 (\$ billions)

Gains created by strong markets,  
 low inflation plus flat salary growth

11.5

Government promised to pay  
 \$7.8 billion unfunded liability

\$(7.8)

Government used  
 \$1.5 billion to offset  
 special payments

1990

1993



( Since 1990, the plan )  
has created gains totalling  
\$12.5 billion.

the education sector as part of the government's overall cost-cutting program. The OTF also received an equal sharing of future gains and losses, rather than waiting for parity at a later date. The government took the \$1.5 billion gain by eliminating special payments between January 1993 and July 1996, for a saving of \$1.2 billion, and reducing government contributions by \$325 million in 1994 and 1995.

*After implementation of the agreement, the gain was eliminated, and the government owed \$6.2 billion in special payments.*

#### FUNDING VALUATION RESULTS BEFORE APPLICATION OF GAIN

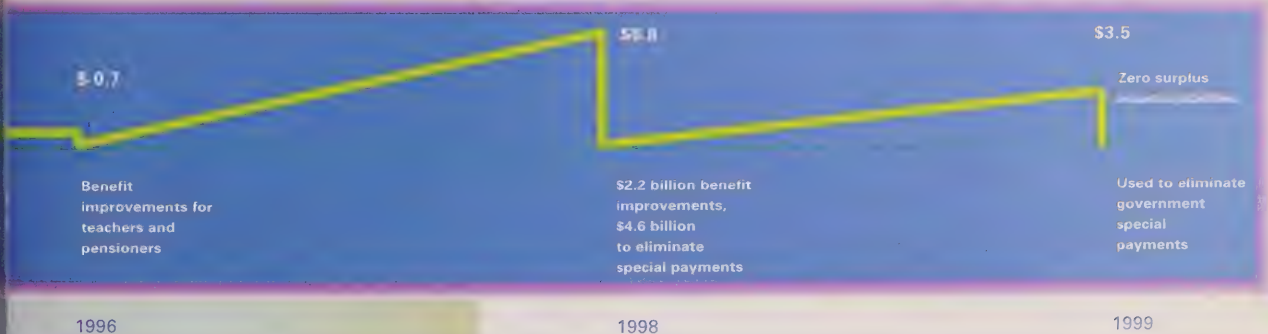
(\$ Billions, at January 1)	1999	1998
Value of assets	\$54.0	\$48.5
Future contributions	12.0	12.6
Special payments	3.7	8.5
Total assets	69.7	69.6
Future benefits	66.2	62.8
Gain	\$ 3.5	\$ 6.8

**1996 valuation** By January 1, 1996, the value of assets had risen a further 44.5 percent. Invested assets were now two-thirds equities and one-third fixed-income securities. Stocks and bonds at home and abroad had performed well, and the plan benefited from the continued expansion into equities. The plan had earned an average annual rate of return of 13.1 percent since the 1993 valuation.

Inflation and salary increases were even lower than the levels assumed in 1993, requiring a further reduction in the estimated cost of future pensions. The revised valuation disclosed a \$712 million gain. As the partners could not agree on the use of the gain, a board of arbitration ruled that it should be spent on improving member benefits.

*Following the arbitrator's decision, \$78 million in gains remained, partly as a result of changes in valuation assumptions. The province owed \$8.4 billion in special payments which had increased in value as expected.*

**1998 valuation** The January 1, 1998 valuation found that assets had risen by 35.7 percent during the preceding two years. Canadian and foreign stocks and bonds had performed extremely well, although they were



--( The Ontario )--  
*government has paid \$2.1 billion in  
special payments since 1990.*

volatile in the second half of 1997. Invested assets were about 75 percent equities and 25 percent fixed-income securities and had earned an average annual rate of return of 17.3 percent since the 1996 valuation. The government also paid \$608 million in 1996 and 1997 toward the pre-1990 unfunded liability.

The valuation assumed a two percent rate for inflation and salary increases in 1998 and 1999, reducing the estimated cost of future benefits further. The valuation disclosed a gain of \$6.8 billion.

In April 1998, the partners agreed to share the 1998 gain and future gains in the following sequence:

- (i) \$2.2 billion would be spent on improving benefits;
- (ii) the government would eliminate special payments on the pre-1990 unfunded liability, at an estimated cost of \$8.4 billion; and
- (iii) \$6.2 billion in future gains (\$8.4 billion less the \$2.2 billion) would be spent on improved benefits, reduced contribution rate for members, or held in a contingency fund, as determined by the OTF.

As a result, \$2.2 billion of the 1998 surplus is being used to fund early retirement incentives and to increase pension payments after the CPP reduction at age 65. Between June 1, 1998 and December 31, 2002, teachers can retire on unreduced pension if their age and years of qualifying service add up to 85 rather than 90. In 1998, 6,800 teachers took advantage of this incentive.

The government used the remaining \$4.6 billion of the 1998 gain to reduce the adjusted present value of special payments to \$3.9 billion. In 1998, the government paid \$492 million in special payments. After adjustments for interest on the outstanding balance, the value of remaining special payments was approximately \$3.6 billion at the 1998 year end.

The partners agreed that future gains would first be used to eliminate the remaining special payments, and that the next \$6.2 billion would be available exclusively to the OTF.

*After these initiatives, the gains were zero.*

**1999 valuation** The January 1, 1999 valuation showed gains of \$3.5 billion, which were used to reduce the government's remaining special payments to \$127 million. This balance is expected to be paid by April 1999.

*Following the 1999 valuation, the gains were zero, but there was \$5.1 billion left in the smoothing reserve.*

( The funding )  
valuation shows no surplus  
left in the plan.

## RETIREMENT COMPENSATION ARRANGEMENT

Historically, members contributed on all their earnings and received a pension on all their earnings. In 1992, the federal government limited the pension that could be paid from registered pension plans in an attempt to put them on a similar basis to other retirement vehicles, such as RRSPs.

The partners responded in 1992 by creating a supplementary plan, called a retirement compensation arrangement (RCA), to top up amounts that cannot be provided by a registered plan. A small number of higher salaried members can contribute on all their earnings and receive pensions based on all their earnings. Members with qualifying credit not allowed by the *Income Tax Act (Canada)* will also benefit from the RCA.

The RCA is managed in conjunction with the registered plan. However, 50 cents of every dollar contributed must be deposited interest-free with the federal government. Consequently, investment growth in the RCA would be at half the rate of the registered plan because the rate of return applies to only half the assets in the RCA. As a result, the partners have decided to fund the RCA on a pay-as-you-go basis and permit unfunded liabilities to accumulate. This produced an imbalance between net assets of \$1.0 million and accrued pension benefits of \$266 million as at December 31, 1998. These liabilities represent less than one percent of total plan accrued pension benefits. We expect these liabilities to fluctuate widely reflecting even minor changes in assumptions about economic and demographic trends.

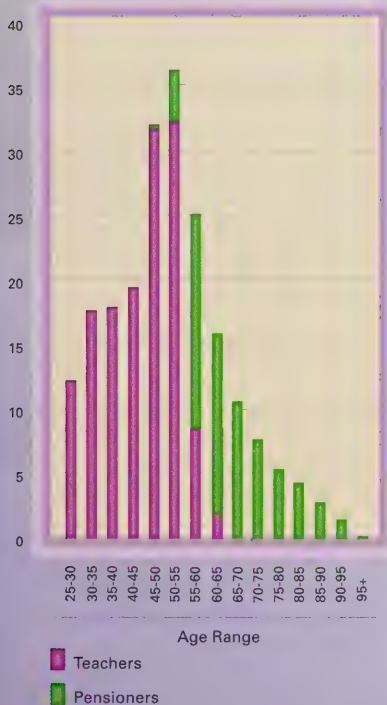
The RCA is discussed further in note 11 to the financial statements.

## YEAR 2000

Most of the systems used at the pension board are relatively new and Year 2000 compliant. However, we will complete testing of all internal systems in 1999 and modify or replace any non-compliant hardware or software. It is not possible to be absolutely certain that the systems of all third parties, such as other financial institutions and suppliers, are compliant. In 1999 we will complete analysis and testing of the information provided to us by our key suppliers to be sure that it is compliant. Otherwise, we are relying on third parties either to be compliant or inform us if they are not so that we can make appropriate contingency plans.

**Teachers' & Pensioners' Ages**  
as at December 31, 1998

(thousands)



( Our systems are )  
new and ready for the  
Year 2000.

Because most of our systems are new, the work done to inventory, evaluate, modify, replace or test systems and processes is not a material expenditure.

## OUTLOOK

The gains created over the past nine years are the result of strong investment returns combined with low inflation. Management believes, however, that real investment returns (after inflation) will fluctuate between four and five percent over the next few years rather than the 11 percent earned since 1990.

Should asset values deteriorate and lead to an unfunded liability over a three-year period, the partners (the OTF and the Ontario government) will be required to make up the shortfall. This could involve an increase in contribution rates if a reserve is not available to return the plan to a fully funded status. Current contributions from members and the government represent less than two percent of total liabilities on a funding basis. The aging of the plan's membership, with a substantial increase in the ratio of retired to active teachers, reduces the plan's capacity to sustain a major loss.

Since 1990, superior investment returns have created \$12.5 billion in gains which the partners have used to pay for improved benefits for teachers and pensioners and to eliminate the government's special payments.

We have recommended to the partners that they consider leaving some gains in the fund in future. This would create a cushion to protect the teachers and the government against a loss and keep contribution rates stable.



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**MANAGEMENT'S**

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**RESPONSIBILITY FOR FINANCIAL  
REPORTING**

The financial statements of the Ontario Teachers' Pension Plan have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must, of necessity, be based on estimates and judgements. The accounting policies followed in the preparation of these financial statements conform with generally accepted accounting principles. Financial information presented throughout the annual report is consistent with the financial statements.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded and proper records maintained. These controls include quality standards in hiring and training of employees, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization. Internal controls are reviewed and evaluated by internal audit programs which are subject to scrutiny by the external auditors.

Ultimate responsibility for the financial statements rests with the Board of Directors. The board is assisted in its responsibilities by the Audit and Actuarial Committee, consisting of five directors who are not officers or employees of the plan administrator. In addition, the committee reviews the recommendations of the internal and external auditors for improvements in internal control and the action of management to implement such recommendations. In carrying out its duties and responsibilities, the committee meets regularly with management and with both the external and internal auditors to review the scope and timing of their respective audits, to review their findings and to satisfy itself that their responsibilities have been properly discharged. This committee reviews the financial statements and recommends them for approval by the board.

The plan's external auditors, Deloitte & Touche LLP, have conducted an independent examination of the financial statements in accordance with generally accepted auditing standards, performing such tests and other procedures as they consider necessary to express the opinion in their Report to the Administrator. The external auditors have full and unrestricted access to the Audit and Actuarial Committee to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal control systems.



CLAUDE LAMOUREUX  
PRESIDENT AND CHIEF EXECUTIVE OFFICER



ANDREW JONES  
VICE-PRESIDENT, FINANCE

*February 17, 1999*



William M. Mercer Limited was retained by the Ontario Teachers' Pension Plan Board (the "Board") to perform an actuarial valuation of the assets and the going concern liabilities of the Ontario Teachers' Pension Plan (the "Plan") as at December 31, 1998, for inclusion in the Plan's financial statements. As part of the valuation, we examined the Plan's recent experience with respect to the non-economic assumptions and presented our findings to the Board. In addition, we provided the Board with statistical, survey and other information used to develop its long-term economic assumptions.

The valuation of the Plan's actuarial liabilities was based on:

- membership data provided by the Ontario Teachers' Pension Plan Board as at December 31, 1997;
- methods prescribed by the Canadian Institute of Chartered Accountants for pension plan financial statements;
- assumptions about future events (for example, future rates of inflation and future rates of return on the pension fund) which have been communicated to us as the Board's best estimate of these events;
- information provided by the Education Relations Commission on negotiated wage settlements in the 1997/98 and 1998/1999 school years; and
- an estimate of the salary grid increase for the 1998/99 school year provided by the Partners.

The objective of the financial statements is to fairly present the financial position of the Plan on December 31, 1998 as a going concern. This is different from the statutory valuation (the actuarial valuation required by the *Teachers' Pension Act* and the *Pension Benefits Act (Ontario)*), which uses actuarial methods prescribed by the *Teachers' Pension Act* and cautious assumptions about future events to establish a prudent level for future contributions.

While the actuarial assumptions used to estimate liabilities for the Plan's financial statements represent the Board's best estimate of future events, and while in our opinion these assumptions are reasonable, the Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations, and will affect the financial position of the Plan, and the contributions required to fund it, at that time.

We have tested the data for reasonableness and consistency, and we believe it to be sufficient and reliable for the purposes of the valuation. We also believe that the methods employed in the valuation and the assumptions are, in aggregate, appropriate for the purposes of the valuation. Our opinions have been given, and our valuation has been performed, in accordance with accepted actuarial practice.

LESTER J. WONG, F.C.I.A.

February 17, 1999

MALCOLM P. HAMILTON, F.C.I.A.

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**AUDITORS'**

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**REPORT TO THE ADMINISTRATOR**



We have audited the statement of net assets available for benefits and accrued pension benefits and surplus of the Ontario Teachers' Pension Plan as at December 31, 1998 and the statements of changes in net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended. These financial statements are the responsibility of the Plan's administrator. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the net assets available for benefits and accrued pension benefits and surplus of the Plan as at December 31, 1998 and the changes in its net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended in accordance with generally accepted accounting principles.

A handwritten signature in blue ink that reads "Deloitte &amp; Touche LLP".

CHARTERED ACCOUNTANTS  
TORONTO, CANADA

*February 17, 1999*

**STATEMENT**

**OF NET ASSETS AVAILABLE FOR BENEFITS AND**

**ACCRUED PENSION BENEFITS AND SURPLUS**

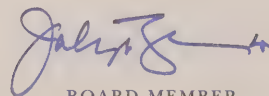
AS AT DECEMBER 31, 1998

(\$ Millions)	1998	1997
<b>NET ASSETS AVAILABLE FOR BENEFITS</b>		
<b>Assets</b>		
Investments (note 2)	\$63,456	\$60,507
Receivable from the Province of Ontario (note 4)	1,233	1,262
Cash	28	15
Fixed assets	8	7
Receivable from brokers	5	956
	<u>64,730</u>	<u>62,747</u>
<b>Liabilities</b>		
Accounts payable and accrued liabilities (note 3)	5,559	8,268
<b>Net assets available for benefits</b>	59,171	54,479
Actuarial asset value adjustment (note 1e)	(4,788)	(5,578)
<b>Actuarial value of net assets available for benefits</b>	<u>\$54,383</u>	<u>\$48,901</u>
<b>ACCRUED PENSION BENEFITS AND SURPLUS</b>		
Accrued pension benefits (note 5)	\$48,636	\$44,457
Surplus	5,747	4,444
<b>Accrued pension benefits and surplus</b>	<u>\$54,383</u>	<u>\$48,901</u>

ON BEHALF OF THE BOARD



CHAIR



BOARD MEMBER



**STATEMENT**

**OF CHANGES IN NET ASSETS**

**AVAILABLE FOR BENEFITS**

FOR THE YEAR ENDED DECEMBER 31, 1998

<i>(\$ Millions)</i>	1998	1997
<b>Net assets available for benefits, beginning of year</b>	<b>\$54,479</b>	<b>\$47,429</b>
<b>Investment operations</b>		
Investment income (note 6)	5,137	7,246
Investment expenses (note 10a)	(67)	(59)
Net investment operations	5,070	7,187
<b>Client service operations</b>		
Contributions (note 8)	1,757	1,696
Benefits (note 9)	(2,103)	(1,802)
Client service expenses (note 10b)	(32)	(31)
Net client service operations	(378)	(137)
<b>Net increase in net assets</b>	<b>4,692</b>	<b>7,050</b>
<b>Net assets available for benefits, end of year</b>	<b>\$59,171</b>	<b>\$54,479</b>

# STATEMENT OF CHANGES IN ACCRUED PENSION BENEFITS

FOR THE YEAR ENDED DECEMBER 31, 1998

(\$ Millions)	1998	1997
Accrued pension benefits, beginning of year	\$44,457	\$41,833
<b>Increase in accrued pension benefits</b>		
Interest on accrued pension benefits	3,416	3,425
Benefits accrued	1,305	1,204
Changes in actuarial assumptions (note 5a)	216	675
Changes in plan provisions (note 5b)	2,031	—
Provision for anticipated 1998 retirements (note 5b)	362	—
	7,330	5,304
<b>Decrease in accrued pension benefits</b>		
Benefits paid (note 9)	2,103	1,802
Experience gains (note 5c)	1,048	878
	3,151	2,680
<b>Net increase in accrued pension benefits</b>	4,179	2,624
Accrued pension benefits, end of year	\$48,636	\$44,457

# STATEMENT OF CHANGES IN SURPLUS

FOR THE YEAR ENDED DECEMBER 31, 1998

(\$ Millions)	1998	1997
Surplus, beginning of year	\$4,444	\$1,180
Increase in net assets available for benefits	4,692	7,050
Change in actuarial asset value adjustment (note 1e)	790	(1,162)
Increase in actuarial value of net assets available for benefits	5,482	5,888
Net increase in accrued pension benefits	(4,179)	(2,624)
Surplus, end of year	\$5,747	\$4,444

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**NOTES**

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**TO FINANCIAL STATEMENTS**

FOR THE YEAR ENDED DECEMBER 31, 1998

**DESCRIPTION OF PLAN**

The following description of the Ontario Teachers' Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Pension Act* as amended.

(a) **GENERAL** The Plan is a contributory defined benefit pension plan co-sponsored by the Partners who are the Province of Ontario (the Province) and Plan members, represented by the Ontario Teachers' Federation. Contributions are made by active members of the Plan and matched by the Province and designated private schools and organizations. The Plan is registered with the Financial Services Commission of Ontario and the *Income Tax Act (Canada)* (registration number 0345785).

(b) **FUNDING** Plan benefits are funded by contributions and investment earnings. The determination of the value of the benefits and required contributions is made on the basis of periodic actuarial valuations (see note 7).

(c) **RETIREMENT PENSIONS** A retirement pension is available based on the number of years of credited service, best five year average salary and age of the member at retirement. A member is eligible for a reduced retirement pension from age 55. An unreduced retirement pension is available at age 65 or at any age if the member has 35 years credit or the sum of a member's age and qualifying service equals 90 (see note 5b).

(d) **DISABILITY PENSIONS** A disability pension is available at any age to a disabled member with a minimum of 10 years of credited service. The type of disability pension is determined by the extent of the disability.

(e) **DEATH BENEFITS** Death benefits are available on the death of a member and may be available on the death of a pensioner. The benefit may take the form of a survivor pension, lump sum payment or both.

(f) **ADDITIONAL CREDITED SERVICE** Members can obtain additional credited service in the Plan for certain absences or transfers from other plans.

(g) **WITHDRAWALS FROM THE PLAN** Withdrawal refunds, transfers and commuted value transfers are available subject to the lock-in provisions when a member ceases to be employed in education prior to qualifying for an immediate pension.

(h) **ESCALATION OF BENEFITS** Pension benefits are adjusted annually for inflation at 100 per cent of the Consumer Price Index, subject to a limit of 8 per cent in any one year with any excess carried forward.

(i) **INCOME TAXES** The Plan is a Registered Pension Plan as defined in the *Income Tax Act (Canada)* and, consequently, is not subject to income taxes.

(j) **RETIREMENT COMPENSATION ARRANGEMENT** The Retirement Compensation Arrangement (RCA) has been created by agreement between the Province and the Ontario Teachers' Federation as a supplementary plan to provide the members of the Plan with benefits that, due to limitations imposed by the *Income Tax Act (Canada)* and its regulations, cannot be provided under the Registered Pension Plan. Because the RCA is a separate trust, the net assets available for benefits and accrued benefits of the RCA are not included in these financial statements (see note 11).

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (a) BASIS OF PRESENTATION

These financial statements present the financial position and the results of operations of the Plan and are prepared in accordance with generally accepted accounting principles.

### (b) INVESTMENTS AND DERIVATIVE CONTRACTS

**Valuation of investments** Investments are recorded as of the trade date and are stated at fair value. Fair value is the amount of the consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Province of Ontario Debentures (the Debentures), which are not marketable, are stated at estimated fair values calculated by discounting the Debentures cash flows based on year-end implied market yields of comparable securities. Money market, publicly traded bonds and equity securities are valued at year-end market prices. Other investments for which market quotations are not available, such as real estate properties, mortgages and private placements, are valued on a current market yield or appraised basis.

**Valuation of derivative contracts** Interest rate, foreign currency, commodity and equity futures, forwards, options, swaps and forward rate agreements are recorded as of trade date and are stated at the estimated amounts of consideration that the Plan would receive or pay at the reporting date in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act, with the resulting gain or loss being recognized in unrealized investment income.

**Securities purchased under agreements to resell** Securities purchased under agreements to resell, being the receivables resulting from securities which the Plan has purchased and simultaneously committed to resell at a specified price on a specified date in the future, are recorded as of trade date and are stated at fair value. Interest income earned is included in income for the related investments.

**Securities sold under agreements to repurchase** Securities sold under agreements to repurchase, being the liabilities resulting from securities which the Plan has sold and simultaneously committed to repurchase at a specified price on a specified date in the future, are recorded as of trade date and are stated at fair value. Interest expense incurred is netted against interest income for the related investments.

**Securities sold but not yet purchased** Securities sold but not yet purchased, which represent the Plan's obligation to deliver securities which were not owned at the time of sale, are recorded as of the trade date and are stated at fair value. Gains or losses are included in income for the related investments.

**Unrealized gains and losses** The change in the difference between fair value and the cost (being the purchase price) of investments at the beginning and end of each year represents unrealized gains and losses and are included in investment income.

**Accrual of income** Interest income, interest expense and dividend income have been accrued to the year end date.



(c) FOREIGN CURRENCY TRANSLATION

Assets and liabilities related to foreign currency transactions are translated into Canadian dollars at the exchange rate in effect at the balance sheet date. The income and expense amounts related to these transactions are translated into Canadian dollars at the rates of exchange prevailing at the dates of the transactions. The realized and unrealized gains and losses arising from these translations are included in investment income.

(d) ACCRUED PENSION BENEFITS

Accrued pension benefits and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries. The valuation is made as at the start of the year and then extrapolated to year end. It uses the projected benefit method prorated on service and management's best estimate of future economic events (see note 5).

(e) ACTUARIAL ASSET VALUE ADJUSTMENT

The actuarial value of net assets available for benefits is determined by reference to long-term market trends consistent with assumptions underlying the valuation of accrued pension benefits. The adjustment represents the difference between the actual and management's best estimate of return on the Plan amortized over five years. Using this adjustment, fair value remains the underlying basis for asset valuation, but fluctuations are averaged over a five-year period.

The year over year change in the actuarial asset value adjustment is reflected in the Statement of Changes in Surplus.

(f) CONTRIBUTIONS AND BENEFITS

Contributions are recorded on the accrual basis except for special payments from the Province which are recorded in the year in which they are received (see note 7).

Benefits are recorded on the accrual basis.

(g) USE OF ESTIMATES

In preparing these financial statements, management must make certain estimates and assumptions which primarily affect the reported values of assets and liabilities, related income and expenses and related disclosures.

## 2. INVESTMENTS

The investment objectives of the Plan are to minimize the likelihood of an increase in contribution rates and to protect the pension benefits of the Plan members. The strategy employed to achieve these objectives is to invest cash flow from contributions, maturing Debentures and investment returns into a diversified pool of Canadian and foreign assets.

The Plan has \$18.9 billion (1997 – \$19.3 billion) in non-marketable Debentures which must be held to maturity. The Debentures have interest rates and a maturity profile that exposes the Plan to significant fluctuations in fair value. To manage these fluctuations, foreign currency volatility and other exposures in a manner consistent with its investment objectives, the Plan uses: interest rate, foreign currency, commodity and equity futures, forwards, options, swaps, and forward rate agreements (collectively called derivative contracts); and securities purchased under agreements to resell, securities sold under agreements to repurchase and securities sold but not yet purchased. These derivative contracts and other investments allow the Plan to retain the Debentures while achieving its objectives of asset diversification. Through derivative contracts, the investment returns from the Debentures are exchanged for returns equivalent to those which would be earned by investing directly in money market and equity securities, as described in note 2b.

The Plan also utilizes derivative contracts in anticipation of movements in the markets. The intention of this activity is to enhance investment returns.

(a) INVESTMENTS BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS AND INVESTMENT-RELATED RECEIVABLES AND LIABILITIES

The schedule below summarizes the fair value and the cost of the Plan's investments including net accrued interest and dividends of \$437 million (1997 - \$356 million), before giving effect to derivative contracts and investment-related receivables and liabilities, as at December 31:

(\$ Millions)	1998		1997	
	Fair Value	Cost	Fair Value	Cost
<b>Fixed income</b>				
Debentures <sup>(1)</sup>	\$18,933	\$13,910	\$19,288	\$14,376
Money market securities	1,468	1,456	2,792	2,778
Bonds				
Canadian	9,535	9,307	4,912	4,773
Foreign	1,597	1,589	1,213	1,204
Mortgages	219	213	197	187
	31,752	26,475	28,402	23,318
<b>Equities</b>				
Canadian	17,557	13,570	19,436	13,750
United States	2,224	2,173	1,426	1,164
Non-North American	6,261	4,916	4,679	3,840
	26,042	20,659	25,541	18,754
<b>Real estate properties</b>	1,582	1,567	1,561	1,608
	59,376	48,701	55,504	43,680
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	426	400	2,615	2,616
Receivables from derivative contracts, net	3,654	326	2,388	346
<b>INVESTMENTS</b>	63,456	49,427	60,507	46,642
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase (note 3)	(1,275)	(1,241)	(2,736)	(2,737)
Securities sold but not yet purchased (note 3)	(146)	(146)	(915)	(916)
Real estate indebtedness (note 3)	(374)	(331)	(371)	(339)
Accrued liabilities for derivative contracts, net (note 3)	(3,555)	(205)	(3,537)	(220)
<b>Net investments (note 2c)</b>	\$58,106	\$47,504	\$52,948	\$42,430

<sup>(1)</sup> For details, refer to the Schedule of Province of Ontario Debentures on page 55.

(b) **DERIVATIVE CONTRACTS**

Derivatives are financial contracts, the value of which is derived from the value of underlying assets or interest rates or exchange rates. The Plan utilizes such contracts for asset mix management purposes; for managing the fund's exposure to interest rate and foreign currency volatility; and for trading purposes.

Notional amounts of derivative contracts represent the volume of outstanding transactions and do not represent the potential gain or loss associated with the market risk or credit risk of such transactions. Rather, they serve as the basis upon which the returns from, and the fair value of, the contracts are determined.

Derivative contracts, transacted either in the over-the-counter market directly between two counterparties or on regulated exchange markets, include:

(i) **Swap contracts** Interest rate swaps are contractual obligations in which two counterparties exchange interest rate flows over a period of time based on a notional principal amount. One party typically agrees to pay a fixed interest rate in return for receiving a floating interest rate.

Equity and commodity swaps are contractual obligations between two counterparties to exchange cash flows based upon an equity or commodity index return. Typically, one party agrees to pay a floating interest rate in return for receiving a return on a specified equity or commodity index.

Cross-currency swaps are contractual obligations between two counterparties in which a foreign currency is simultaneously purchased in the spot market and sold in the forward market, or vice-versa. Cross-currency interest rate swaps are contractual obligations in which two counterparties exchange notional and interest flows in different currencies over a period of time.

(ii) **Futures and forwards contracts** Futures and forwards are contractual obligations either to buy or to sell a specified amount of money market securities, bonds, equity indices, commodities or foreign currencies at predetermined future dates and prices.

Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margining. Forwards are customized contracts transacted in the over-the-counter market. As a result of entering into these contracts, returns are generated that are equivalent to the gain or loss that would arise if the securities or foreign currencies had been bought or sold directly at the future price.

(iii) **Option contracts** Option contracts are agreements in which the right, but not the obligation, is acquired by the option purchaser from the option writer either to buy or sell, on or before a specified date, a predetermined amount of a financial instrument at a stated price.

The following table summarizes the Plan's derivative contracts held as at December 31:

(\$ Millions)	1998		1997	
	Notional	Fair Value	Notional	Fair Value
<b>Asset conversion</b>				
Interest rate swaps	\$ 7,072	\$(1,195)	\$10,856	\$(1,441)
Equity and commodity swaps	10,925	5,515	11,818	2,894
		<u>4,320</u>		<u>1,453</u>
<b>Interest rate management</b>				
Interest rate swaps	496	1	4,020	(12)
Futures	10,112	(13)	5,412	(3)
Exchange traded options				
Purchased	3,474	1	953	2
Written	4,994	(4)	168	—
Over-the-counter options				
Purchased	350	2	15	1
Written	141	(1)	29	(1)
		<u>(14)</u>		<u>(13)</u>
<b>Foreign currency management</b>				
Cross currency swaps	723	(64)	—	—
Forwards	28,155	(82)	15,653	(31)
		<u>(146)</u>		<u>(31)</u>
<b>Trading</b>				
Interest rate swaps	3,547	(38)	1,583	(21)
Futures	1,975	(36)	1,487	(31)
Forwards	7,877	(28)	9,943	(164)
Exchange traded options				
Purchased	4	1	20	1
Written	197	(7)	668	(30)
Over-the-counter options				
Purchased	699	5	3,200	17
Written	559	(19)	1,237	(6)
		<u>(122)</u>		<u>(234)</u>
		4,038		1,175
Less: Net cash collateral received				
under derivative contracts		<u>(3,939)</u>		<u>(2,324)</u>
<b>Net fair value of derivative contracts</b>		<u>\$ 99</u>		<u>\$(1,149)</u>
<b>Represented by:</b>				
Receivables from derivative contracts		\$ 7,001		\$ 3,945
Cash collateral paid under derivative contracts		591		766
Accrued liabilities for derivative contracts		(2,963)		(2,770)
Cash collateral received under derivative contracts		<u>(4,530)</u>		<u>(3,090)</u>
		<u>\$ 99</u>		<u>\$(1,149)</u>



The derivative contracts on page 40 mature within one year except for the following which have a weighted average maturity (in years) of:

	1998	1997
<b>Asset conversion</b>		
Interest rate swaps	5.9	5.4
Equity and commodity swaps	1.0	1.4
<b>Interest rate management</b>		
Interest rate swaps	3.5	4.5
<b>Foreign currency management</b>		
Cross currency swaps	7.9	—
<b>Trading</b>		
Options	3.2	—

(c) INVESTMENTS AFTER ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS AND INVESTMENT-RELATED RECEIVABLES AND LIABILITIES

The Plan's investments at fair value, before and after giving effect to the derivative contracts and investment-related receivables and liabilities on the Plan's investments at December 31 are summarized below:

(\$ Millions)	1998		1997	
	<i>At Fair Value (per note 2a)</i>	<i>Effective Net Investments at Fair Value</i>	<i>At Fair Value (per note 2a)</i>	<i>Effective Net Investments at Fair Value</i>
<b>Fixed income</b>	\$31,752	\$14,495	\$28,402	\$11,873
<b>Equities and commodities</b>				
Canadian	17,557	17,613	19,436	19,433
United States	2,224	11,482	1,426	9,069
Non-North American	6,261	12,934	4,679	11,012
	26,042	42,029	25,541	39,514
<b>Real estate properties</b>	1,582	1,582	1,561	1,561
	59,376	58,106	55,504	52,948
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	426	—	2,615	—
Receivables from derivative contracts, net	3,654	—	2,388	—
<b>INVESTMENTS</b>	63,456	58,106	60,507	52,948
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase	(1,275)	—	(2,736)	—
Securities sold but not yet purchased	(146)	—	(915)	—
Real estate indebtedness	(374)	—	(371)	—
Accrued liabilities for derivative contracts, net	(3,555)	—	(3,537)	—
<b>Net investments</b>	\$58,106	\$58,106	\$52,948	\$52,948

(d) INTEREST RATE RISK

Interest rate risk refers to the adverse consequences of interest rate changes on the Plan's cash flows, financial position and income. This risk arises from differences in the timing and amount of cash flows related to the Plan's assets and liabilities.

The value of the Plan's assets is affected by short-term changes in nominal interest rates and equity markets. Pension liabilities are exposed to the long-term expectation of rate of return on the investments as well as expectations of inflation and salary escalation.

The Plan's primary exposure is to a decline in the long-term real rate of return which may result in higher contribution rates required to meet pension obligations. As at December 31, 1998, holding the inflation and salary escalation assumptions constant, a 1% change in the assumed real long-term rates of return would result in a change in the pension liabilities of approximately 16% (1997 – 16%).

To match these liabilities the Plan has established a policy asset mix of approximately 70% equities and 30% fixed income securities. The returns on fixed income securities are sensitive to changes in nominal interest rates while long-term equity returns have historically shown high correlation with changes in inflation and salary escalation.

After giving effect to the derivative contracts and investment-related receivables and liabilities discussed in note 2b, a 1% increase in nominal interest rates would result in a decline in the value of the fixed income securities of 9.5% (1997 – 6.8%).

(e) CREDIT RISK

Credit risk is the risk of loss in the event the counterparty to a transaction defaults, or otherwise fails to perform under the terms of a contract.

At December 31, 1998, the Plan's most significant concentration of credit risk was with the Province. This concentration relates primarily to the holding of \$18.9 billion of Debentures, a receivable of \$1.2 billion and future funding requirements of the Plan.

The Plan limits derivative contract credit risk by dealing with counterparties that have a credit rating of A and higher, and by utilizing an internal credit limit monitoring process, as well as through the use of credit mitigation techniques such as master netting arrangements and obtaining collateral where appropriate.

(f) FOREIGN CURRENCY RISK

Foreign currency exposure arises from the Plan's holdings of foreign currency-denominated investments and related derivative contracts.

The Plan hedges some of this exposure based on interest rate spreads between various countries or other economic fundamentals. The Plan also takes trading positions in foreign currencies with the objective of increasing returns. As at December 31, 1998 the Plan's net foreign currency exposure after giving effect to the related hedge was as follows:

(\$ Millions)	1998			1997
Country	Foreign Currency Exposure	Net Foreign Currency Hedge	Net Foreign Currency Exposure	Net Foreign Currency Exposure
United States	\$ 8,915	\$ 4,474	\$ 4,441	\$ 5,322
United Kingdom	2,466	1,247	1,219	941
Japan	1,910	996	914	1,446
France	1,245	543	702	407
Switzerland	865	463	402	249
Germany	730	637	93	358
Other	4,837	1,666	3,171	3,861
	<u>\$20,968</u>	<u>\$10,026</u>	<u>\$10,942</u>	<u>\$12,584</u>

### 3. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

(\$ Millions)	1998	1997
Accrued liabilities for derivative contracts, net	\$3,555	\$3,537
Securities sold under agreements to repurchase	1,275	2,736
Real estate indebtedness	374	371
Payable to brokers	152	654
Securities sold but not yet purchased	146	915
Other accounts payable and accrued liabilities	57	55
	<u>\$5,559</u>	<u>\$8,268</u>

### 4. RECEIVABLE FROM THE PROVINCE OF ONTARIO

The receivable from the Province consists of required matching contributions and interest thereon.

(\$ Millions)	1998	1997
Contributions receivable	\$1,165	\$1,175
Accrued interest	68	87
	<u>\$1,233</u>	<u>\$1,262</u>

The receivable from the Province is comprised of amounts to be received as follows: \$627 million in 1999 and \$606 million in 2000.

### 5. ACCRUED PENSION BENEFITS

#### (a) ACTUARIAL ASSUMPTIONS

The actuarial assumptions used in determining the value of accrued pension benefits reflect management's best estimate of expected long-term economic trends, as follows:

	1998	1997
Asset rate of return	7.25%	7.75%
Salary escalation rate	3.50%	4.00%
Inflation rate	2.50%	3.00%

In 1998 there was a change in the assumed inflation rate from 3.0% to 2.5%. Since the assumed rate of return on assets and the salary escalation rate are influenced by the inflation assumption, these have also been reduced by 0.5% from last year's level.

In addition, there was a change in the assumed retirement rates in conjunction with Plan changes. This impact is included in the Plan provisions information below. The changes in the actuarial assumptions in 1998 resulted in a net increase in the value of accrued pension benefits of \$216 million. In 1997, similar changes to the actuarial assumptions resulted in a net increase in the value of accrued pension benefits of \$675 million.

(b) **PLAN PROVISIONS**

The Plan was amended effective June 1, 1998 to incorporate changes arising out of an agreement reached by the Partners on April 18, 1998. The main change having a direct impact on the actuarial valuation of the Plan is the provision of an early retirement window covering the period between June 1, 1998 and December 31, 2002, during which time a member can retire with an unreduced pension if the sum of the member's age and qualifying service equals 85 rather than 90. In addition, the Canada Pension Plan reduction was lowered. These changes resulted in an increase in the value of accrued pension benefits of \$2,031 million. There is also a provision of \$362 million for the higher than anticipated number of retirements in 1998.

(c) **EXPERIENCE GAINS**

Experience gains of \$1,048 million (1997 – \$878 million) arose from differences between the actuarial assumptions and actual results and relate primarily to current experience for members' salary and inflation rates.

**6. INVESTMENT INCOME**

(a) **INVESTMENT INCOME BEFORE ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS**

Investment income, before giving effect to derivative contracts and before allocating the realized and unrealized net gains/losses, for the year ended December 31, is as follows:

(\$ Millions)	1998	1997
<b>Interest income</b>		
Debentures (net of interest incurred on swap contracts of \$820 million; 1997 – \$798 million)	\$ 764	\$ 820
Money market securities	183	109
Bonds		
Canadian	395	190
Foreign	78	37
Mortgages	14	11
	<u>1,434</u>	<u>1,167</u>
<b>Dividend income</b>		
Canadian equities	303	313
United States equities	22	10
Non-North American equities	212	185
	<u>537</u>	<u>508</u>
<b>Real estate properties</b>		
(net of interest expense of \$27 million; 1997 – \$27 million)	83	74
	<u>2,054</u>	<u>1,749</u>
<b>Net gain on investments<sup>(1)</sup></b>	<u>3,083</u>	<u>5,497</u>
	<u>\$5,137</u>	<u>\$7,246</u>

<sup>(1)</sup> Includes net unrealized gains of \$1,435 million (1997 – \$3,345 million).



(b) INVESTMENT INCOME AFTER ALLOCATING THE EFFECT OF DERIVATIVE CONTRACTS

Investment income by asset class, after giving effect to the derivative contracts and allocating the realized and unrealized net gains/losses for the year ended December 31, is as follows:

(\$ Millions)	1998	1997
Fixed income <sup>(2)</sup>	\$1,568	\$1,700
Canadian equities	33	3,021
United States equities <sup>(2)</sup>	1,071	1,696
Non-North American equities <sup>(2)</sup>	2,307	530
Real estate	158	299
	<u>\$5,137</u>	<u>\$7,246</u>

<sup>(2)</sup>Includes net realized and unrealized foreign currency translation losses of \$1,289 million (1997 – \$302 million) related to foreign currency hedging.

(c) INVESTMENT RETURNS AND RELATED BENCHMARK RETURNS

Investment returns and related benchmark returns by main investment portfolio for the year ended December 31, 1998 are as follows:

	1998		1997	
	Investment Returns	Benchmark Returns	Investment Returns	Benchmark Returns
Fixed income	9.2%	10.6%	11.4%	11.5%
Canadian active equity	(0.7)	(1.6)	19.1	15.0
Canadian index equity	(0.9)	(1.6)	15.1	15.0
United States equity	33.5	37.7	37.3	39.2
Non-North American equity	24.9	29.6	5.1	5.1
Real estate	5.3	18.0	22.2	12.6
Merchant banking	12.3	0.4	52.9	17.0
Total Plan	9.9%	11.9%	15.6%	15.6%

Investment returns have been calculated in accordance with the acceptable methods set forth by the Association for Investment Management and Research and the Pension Investment Association of Canada.

The Plan identifies benchmarks to evaluate the performance of the investment management process. The performance of each portfolio is measured against benchmarks that simulate the results of the markets in which the managers invest.

The Total Plan return is measured against a Canadian benchmark produced by aggregating Canadian dollar returns from each of the policy asset class benchmarks, using the asset mix policy weight. The Total Plan return incorporates the Plan's currency trading program, currency overlay policy and tactical asset allocation decisions.

## 7. FUNDING POLICY

Statutory actuarial valuations are prepared periodically in accordance with the *Teachers' Pension Act* to determine the funding requirements of the Plan. Active members are currently required to contribute 7.3 percent of the portion of their salaries covered by the Canada Pension Plan and 8.9 percent of salaries above this level. Aggregate member contributions are matched by the Province and other employers.

The actuarial assumptions and methods used to determine statutory pension liabilities are different than those used to calculate the amounts disclosed in these financial statements. The statutory valuations use a more conservative approach than the valuation used in these financial statements (note 5) and also take into account benefits to be earned and contributions to be made after the valuation date.

The initial statutory valuation of the Plan, prepared by William M. Mercer Limited as at January 1, 1990 disclosed an unfunded liability of \$7.8 billion which was the amount by which the Plan's liabilities exceeded its assets. This liability is the responsibility of the Province and was to be paid off with interest by a series of special payments over the 40 year period which began January 1, 1990. Subsequent statutory valuations treat the present value of the remaining special payments as an asset.

The statutory valuation as at January 1, 1998 disclosed the present value of special payments to be \$8.45 billion, with an actuarial gain of \$6.78 billion. Pursuant to the Partnership Agreement between the Ontario Teachers' Federation (OTF) and the Province, the Partners entered into negotiations to decide how to utilize the gain. Pursuant to the agreement reached on April 18, 1998, the Partners agreed to share the 1998 actuarial gain of \$6.78 billion and future gains in the following sequence:

- (i) \$2.24 billion would be spent in improving benefits;
- (ii) special payments on the pre-1990 unfunded liability would be eliminated at an estimated cost of \$8.45 billion; and
- (iii) a further \$8.45 billion less the \$2.24 billion would be spent on improved benefits, member contribution rate reduction or held in a contingency reserve as determined by the OTF.

As a result, \$2.24 billion of the gain was used to improve benefits under the Plan, and the remaining \$4.54 billion of the gain was used to eliminate the obligation of the Province to make special payments after November 30, 2008. These changes consumed the actuarial gain. The present value of the remaining special payments after application of gains was \$3.91 billion as at January 1, 1998.

The statutory valuation as at January 1, 1999 disclosed the present value of the special payments to be \$3.65 billion with an actuarial gain of \$3.52 billion. Pursuant to the 1998 agreement noted above all of this gain was used to eliminate the obligation of the Province to make the special payments after April 1999.

## 8. CONTRIBUTIONS

(\$ Millions)	1998	1997
<b>Members</b>		
Current service	\$ 600	\$ 577
Optional credit	7	5
	<u>607</u>	<u>582</u>
<b>Province of Ontario</b>		
Current service	587	574
Special payments (note 7)	492	456
Optional credit	3	4
Interest	49	63
	<u>1,131</u>	<u>1,097</u>
Other employers	14	8
Transfer from other pension plans	5	9
	<u>19</u>	<u>17</u>
	<u>\$1,757</u>	<u>\$1,696</u>

## 9. BENEFITS

(\$ Millions)	1998	1997
Retirement pensions	\$1,734	\$1,548
Disability pensions	30	33
Death benefits	90	80
Refunds	31	27
Commuted value transfers	206	108
Transfers to other plans	12	6
	<u>\$2,103</u>	<u>\$1,802</u>

## 10. ADMINISTRATIVE EXPENSES

### (a) INVESTMENT EXPENSES

(\$ Millions)	1998	1997
Salaries and benefits	\$26.4	\$22.0
Investment management fees	16.2	16.0
Premises and equipment	7.1	6.4
Custodial fees	5.6	5.8
Professional consulting services	4.8	3.2
Information services	3.6	2.5
Communication and travel	2.1	1.8
Statutory audit fees	0.3	0.3
Other	1.3	1.1
	<u>\$67.4</u>	<u>\$59.1</u>

(b) CLIENT SERVICE EXPENSES

(\$ Millions)	1998	1997
Salaries and benefits	\$20.3	\$19.0
Premises and equipment	5.7	5.4
Professional consulting services	2.9	4.1
Communication and travel	1.9	1.6
Board and committee remuneration	0.2	0.2
Statutory audit fees	0.2	0.3
Other	0.7	0.8
	<b>\$31.9</b>	<b>\$31.4</b>

(c) EXECUTIVE COMPENSATION

The Compensation Table represents full disclosure of base salary, annual bonus, long-term incentives and other compensation earned in 1996, 1997 and 1998 by the Chief Executive Officer and the four other most highly compensated executives.

Name and Principal Position	Year	Base Salary <sup>(1)</sup>	Annual Bonus <sup>(2)</sup>	Long-term Incentive <sup>(3)</sup>	Group Term Life Insurance	Other Compensation
Claude Lamoureux <i>President &amp; CEO</i>	1998	\$349,077	\$177,600	\$ 0	\$964	\$ 9,600 <sup>(4)</sup>
	1997	322,220	148,400	302,885	897	9,600
	1996	300,100	157,100	260,952	868	9,600
Robert Bertram <i>Senior V.P. Investments</i>	1998	\$269,053	\$ 63,200	\$ 0	\$777	\$13,209 <sup>(5)</sup>
	1997	271,717	159,400	264,460	756	13,058
	1996	256,446	107,400	230,076	741	21,291
Allan Reesor <i>Senior V.P. Client Services &amp; CIO</i>	1998	\$188,736	\$ 94,400	\$ 59,800	\$545	\$ 3,655 <sup>(6)</sup>
	1997	178,069	118,100	32,522	490	3,546
	1996	159,686	58,100	51,813	462	3,095
Heather Hunter <i>V.P. Active Equities</i>	1998	\$176,831	\$191,800	\$ 0	\$510	—
	1997	173,481	289,700	106,869	483	—
	1996	162,580	155,000	93,375	470	—
Michael Lay <i>V.P. Merchant Banking</i>	1998	\$162,519	\$183,300	\$ 0	\$469	\$ 3,143 <sup>(6)</sup>
	1997	73,593	187,200	0	192	—

<sup>(1)</sup> The 1997 base salary includes 27 bi-weekly pay dates.

<sup>(2)</sup> Bonuses for investment professionals are based on a combination of total fund, asset class, and individual performance, measured in dollars of value added. Performance versus benchmark is measured over four annual performance periods.

Bonuses for administration professionals are based on achievement of annual corporate and divisional objectives.

<sup>(3)</sup> The long-term investment incentive program is designed to ensure the organization's competitiveness to attract and retain senior investment professionals. The plan measures the amount total fund performance, net of costs, exceeds a composite benchmark. The benchmark is established from market indices for portfolio performance using the fund's policy asset-mix weights. For the four-year cycle ended December 31, 1998, the total fund performance was below the fund's own composite benchmark, resulting in a zero payout for this cycle (see page 19).

The long-term administration incentive program is based on cost containment and quality objectives as measured by a Quality Service Index. The plan measures performance in these areas over three annual performance periods. For the three-year cycle ended December 31, 1998, the plan exceeded targets.

<sup>(4)</sup> Automobile allowance.

Includes an automobile allowance of \$8,000 per annum plus unused vacation cashout.

Unused vacation cashout.



## 11. RETIREMENT COMPENSATION ARRANGEMENT

The Retirement Compensation Arrangement (RCA) is established in an agreement between the Province of Ontario and the Ontario Teachers' Federation (the Partners), to provide to the members of the Plan certain benefits that would have been provided under the Registered Pension Plan, but for amendments made to the *Income Tax Act* (Canada) and its Regulations that restrict benefits that may be provided under a registered plan for periods of service after 1991 and for certain periods before 1992 that are credited after 1991.

The RCA is administered under a trust separate from the assets of the Registered Pension Plan. The Ontario Teachers' Pension Plan Board (the Board) has been appointed by the Partners to act as the trustee of the RCA.

Because the RCA is a separate trust, the net assets available for benefits and the value of accrued benefits and deficiency, referred to below, have not been included in the accompanying financial statements of the Registered Pension Plan on pages 32 to 50.

The RCA is funded on a pay-as-you-go basis from a portion of the contributions made to the Board by teachers, the Province of Ontario and designated private schools and organizations. The portion is based on a rate determined periodically by the Board's independent actuary in a manner that is expected to be sufficient to pay the benefits over the next twelve months. Due to the funding policy adopted by the Partners, the assets will continue to be substantially less than the liabilities.

A summary of the balance sheet for the RCA, as at December 31, 1998 is as follows:

(\$ Thousands)	1998	1997
<b>Net assets available for benefits</b>		
Assets	\$ 1,240	\$ 886
Liabilities	(202)	(195)
	<u>\$ 1,038</u>	<u>\$ 691</u>
<b>Accrued benefits and deficiency</b>		
Accrued benefits	\$286,098	\$273,210
Deficiency	(285,060)	(272,519)
	<u>\$ 1,038</u>	<u>\$ 691</u>

The actuarial assumptions used in determining the value of the accrued benefits reflect management's best estimate of expected long-term economic trends as follows:

	1998	1997
Asset rate of return	3.625%	3.875%
Salary escalation rate	3.500%	4.000%
Inflation rate	2.500%	3.000%

The assumed asset rate of return has been adjusted to reflect the fact that the RCA investment returns are taxed at a rate of 50 per cent.

The estimate of the value of accrued benefits is highly sensitive to salary increases both actual and assumed. Any changes to the salary assumptions will have a significant impact on the liabilities for future benefits.

In addition, significant uncertainty exists in projecting the trend of the liabilities of the RCA due to:

- possible changes in the number of superintendents and directors of education in the future as a result of possible changes in the education system;

- the difference between future increases in teachers' salaries and future increases in the average national wage; and
- the possibility of changes in indexing the maximum pension limit, under the Tax Regulations.

It is also difficult to predict the benefits expected to be paid over the next twelve months, and therefore, it is possible that the assets will be insufficient to pay the benefits. In such a case, the payment of benefits will be suspended and the contributions raised in order to fund the payments required to reinstate the benefits.

## 12. COMMITMENTS

The Plan has committed to purchase shares and limited partnership units, which will be funded over the next several years in accordance with the terms and conditions agreed to. As at December 31, 1998, these commitments totalled \$2.6 billion (1997 – \$1.1 billion).

## 13. UNCERTAINTY DUE TO THE YEAR 2000 ISSUE

The Year 2000 issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 issue may be experienced before, on, or after January 1, 2000, and if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations.

Management has undertaken initiatives, including modifying or replacing and testing computer systems, designed to identify and address the expected effects of the Year 2000 issue on the Plan. While an assessment of the readiness of third parties, such as employers, counterparties, suppliers and others, is ongoing, it is not possible to be certain that all aspects of the Year 2000 issue affecting the Plan, including those related to the efforts of these, or other third parties, will be fully resolved.

## 14. COMPARATIVE FIGURES

Certain comparative figures have been reclassified to conform with the current year's presentation.

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**STATEMENT**

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**OF CORPORATE GOVERNANCE**

**PRACTICES**

The Toronto and Montreal stock exchanges require listed companies to disclose their system of corporate governance as a condition of continued listing on the exchanges. In our view, effective corporate governance helps to ensure that a company's resources are devoted primarily to enhancing long-term value. We have chosen to comply with the disclosure requirements because:

- we believe we should measure our own behavior by the standards we expect of others; and
- we provide pension services to 312,000 individual customers who have the right to know how their pension plan is governed and managed.

Of the 14 TSE guidelines, all but one apply to the pension plan. The exception recommends that a board committee nominate new directors. In our case, this is done under the partners' agreement by the plan's co-sponsors. We comply generally or specifically with the remaining 13 guidelines.

#### **MANDATE OF THE PENSION PLAN CORPORATION**

The Ontario Teachers' Pension Plan Board is an independent corporation (without share capital) established on January 1, 1990 by the *Teachers' Pension Act*. This Ontario statute requires the corporation to administer the pension plan, manage its investment assets, and pay members and their survivors the benefits promised. The *Teachers' Pension Act* states: "The Board shall administer the pension plan and manage the pension fund in accordance with this Act, the *Pension Benefits Act* (Ontario), and the *Income Tax Act* (Canada)."

The plan is a defined benefit pension plan registered under the *Pension Benefits Act* and the *Income Tax Act* (Canada). It is comprised of a base plan and a supplemental plan (see page 27 and note 11 to the financial statements). The *Pension Benefits Act* (Ontario) defines the fiduciary duties of all pension plan administrators in Ontario and obliges them to administer the plan and invest assets with the same prudence expected of a person dealing with another's property. The standards of conduct expected of a fiduciary are also set out in common law.

The *Teachers' Pension Act* provides for the joint sponsorship of the pension plan by the Ontario government, through the Minister of Education and Training, and the executive of the Ontario Teachers' Federation (OTF), as the representative of plan members.

An agreement signed by the partners effective January 1, 1992 sets out the terms of joint sponsorship. The partners are equally responsible for plan losses and gains. A six-member partners' committee is responsible for changes in plan design and benefit levels. The agreement deals with the appointment of the board of directors and delineates the board's powers and duties other than those set out in legislation. The members of the partners' committee are not members of the board of directors. The partners have also appointed the board as trustee of the supplementary plan.

## COMPOSITION OF BOARD OF DIRECTORS

By law, the board of directors is required to act independently of the sponsoring partners and to make decisions in the best interests of all beneficiaries – that is, the active teachers, former teachers and retired teachers who are plan members as well as the survivors of deceased members. In this respect, the role of the directors is similar to that of any corporation; they are required to act in the best interests of the corporation and its shareholders generally, and not in the interests of any specific group of shareholders.

Each partner appoints four directors and together the partners name the chair as the ninth director. Ted Medland, former chief executive of Wood Gundy Inc., has served as chair since the beginning of 1996.

The partners select directors based on the relevance of their expertise and experience to the mandate of the corporation. No member of management is a director.

## BOARD COMMITTEES

There are four board committees:

- *The investment committee* reviews the investment policy and asset mix, approves annual performance objectives for the investment portfolios, and approves all transactions that exceed the discretionary limits set for management. This committee includes all directors.
- *The audit and actuarial committee* reviews the annual financial statements, recommends the appointment of the external auditors and the independent actuary, and receives their reports. It also receives the reports of the internal auditor. The committee consists of five directors.
- *The benefits adjudication committee* rules on disputes between plan members and board staff about pension benefits. This committee includes two board members as well as nine non-board members nominated by the partners and appointed by the board. Disputes are heard by panels comprised of the two board members and four other committee members.
- *The human resources and compensation committee* approves the salary budgets, annual performance bonuses and long-term performance bonuses for employees. It also reviews succession planning and key employee development. This committee consists of the full board.

The board does not have a corporate governance committee. Governance issues are dealt with by the full board in the normal course of business.

## EFFECTIVENESS OF BOARD

An orientation program is in place for new directors to assist them in executing their fiduciary and governance duties. All directors attend special seminars on specific technical issues, such



as the actuarial valuation of liabilities and the use of derivative contracts. Education is provided by outside experts as well as by staff specialists.

The fact that each director is appointed for a term of two years, and can only serve four consecutive terms, ensures that the partners consider the qualifications and effectiveness of individual directors on a continuing basis.

In 1998, the board and the investment committee met 11 times, the audit and actuarial committee six times, and the human resources and compensation committee three times. The benefits adjudication committee held one appeal hearing and met twice during the year.

## INDEPENDENCE OF BOARD

The structure of the board, and the process for appointing directors, ensures that the board of directors is able to operate independently of management.

To ensure access to external sources of important information, the directors meet from time to time with outside advisers on general topics, as well as with external investment managers and experts in compensation management. Furthermore, the audit and actuarial committee consults directly with the internal and external auditors and the independent actuary and reviews the auditors' findings on the effectiveness of internal controls.

Individual directors can engage an outside adviser, with the approval of the chair, at the organization's expense in appropriate circumstances.

## ROLE OF MANAGEMENT

Ongoing plan administration and investment management is delegated by the board of directors to the chief executive officer and his staff. The staff manages two core businesses – client services and investment services – each supported by general corporate services. This is one of few Canadian pension organizations that provide pension services directly to its members rather than through their employers.

## MANAGEMENT PERFORMANCE

To ensure the interests of management and plan beneficiaries are closely aligned, senior staff receive annual and long-term bonuses based on the achievement of preset performance targets approved by the directors. The board requires management to set annual corporate objectives as well as longer-term business strategies. The objectives are accompanied by an annual financial plan for both fund investment and plan administration.

The strategy for investments is expressed in the *Statement of Investment Policy and Goals*, which the board reviews annually. This document sets out, for example, the long-term asset mix policy as well as the need for the fund to achieve investment returns that exceed the rate of inflation by 4.5 percent.

The board also regularly reviews the strategies for active management of assets. Managers are rewarded for achieving annual and four-year performance targets. In the case of pension plan administration, managers are required to meet annual and three-year performance targets for improvements in the quality of services delivered to members as measured by regular surveys of member opinions, and the effectiveness of managing operating costs.

Every year, the board receives an actuarial valuation of the plan's financial viability and an audited financial statement. The directors also annually review the investment and non-investment risks faced by the organization, and the adequacy of procedures to deal with those risks. In addition, the performance of each investment portfolio is reviewed every quarter.

#### ACCOUNTABILITY AND COMMUNICATIONS

The board has made accountability to the partners and disclosure of activities to plan members the cornerstone of its communication policy. This policy acknowledges that plan members and beneficiaries have a right to know how their contributions are spent and invested.

The annual report is our principal disclosure document. We maintain contact with members and beneficiaries through newsletters, annual statements, focus groups, surveys, presentations, meetings, and telephone discussions and correspondence. We are accountable to members dissatisfied with staff decisions through the benefits adjudication appeal process.

## INVESTMENTS

### OVER \$20 MILLION

AS AT DECEMBER 31, 1998

#### FIXED INCOME

(\$ Millions)				
Type	Maturity Date	Coupon (%)	Fair Value	Cost
Government of Canada bonds	1999-2029	4.75-11.75	\$ 4,180	\$ 4,122
Real return Canada bonds	2021-2026	4.25-4.50	2,795	2,638
Canadian corporate bonds	1999-2059	4.75-11.50	1,793	1,787
United States treasury bonds	2000-2028	4.00-12.0	909	912
Canadian treasury bills	1999	4.63-5.90	622	612
Foreign currency Canadian bonds	2001-2085	0.0-13.0	588	576
Securities purchased under agreements to resell	1999	2.10-5.31	426	400
Commercial paper	1999	4.25-6.10	270	269
International sovereign bonds	2001-2011	5.00-10.0	265	258
Index-linked mortgages	2018-2027	4.63-5.50	219	213
Collateralized loans	1999	5.00-5.55	202	205
Discount instruments	1999	5.05-5.43	191	187
Term deposits	1999	4.00-5.26	111	111
United States treasury bills	1999	3.85-4.04	40	40
Government of Canada residuals	1999	0.00	32	32
Securities sold under agreements to repurchase	1999	0.25-5.31	(1,275)	(1,241)

#### PROVINCE OF ONTARIO DEBENTURES

(\$ Millions)			
Maturity Date	Coupon (%)	Fair Value	Cost
1999 to 2004	8.00-8.99	\$ 293	\$ 286
	9.00-9.99	1,456	1,332
	10.00-10.99	581	502
	11.00-11.99	795	718
	12.00-12.99	1,188	907
	13.00-13.99	1,099	837
		5,412	4,582
2005 to 2010	10.00-10.99	4,194	2,996
	11.00-11.99	3,603	2,505
	12.00-12.99	1,194	840
	13.00-13.99	109	75
	14.00-14.99	507	335
	15.00-15.99	1,624	945
		11,231	7,696
2011 to 2012	10.00-10.99	164	110
	11.00-11.99	1,699	1,095
		1,863	1,205
Total Debentures Net of Accrued Interest		18,506	13,483
Accrued Interest		427	427
<b>Total</b>		<b>\$18,933</b>	<b>\$13,910</b>

## CORPORATE SHARES

(Millions)

<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>
BCE Inc.	13.6	788.3	Agrium Inc.	7.1	96.5
Northern Telecom Limited	9.8	754.2	International Comfort Products Corporation	7.9	95.0
Royal Bank of Canada	8.6	654.9	Renaissance Energy Ltd.	5.4	94.6
Maple Leaf Foods Inc.	37.9	558.6	United Dominion Industries Limited	2.9	93.0
Bank of Nova Scotia, The	13.5	455.6	Westcoast Energy Inc.	3.0	91.6
Cadillac Fairview Corporation	15.7	443.0	Québecor Inc.	2.7	90.3
Bank of Montreal	7.2	442.8	ATS Automation Tooling Systems Inc.	4.5	88.6
Canadian Imperial Bank of Commerce	11.5	437.5	Power Financial Corporation	2.6	87.9
Toronto-Dominion Bank, The	7.2	386.8	Loewen Group Inc., The	6.8	85.4
Seagram Company Ltd., The	6.4	371.1	Transalta Corporation	3.6	81.3
TransCanada PipeLines Limited	13.1	294.5	Loblaw Companies Limited	2.2	81.0
Barrick Gold Corporation	9.6	286.8	Elf Aquitaine SA	0.4	79.0
Canadian Pacific Limited	8.9	256.3	TSE 100 Index Participation Fund Units	2.0	78.1
Imasco Limited	7.6	249.1	Falconbridge Limited	4.7	77.3
Bombardier Inc.	10.5	230.4	Anderson Exploration Ltd.	5.6	77.2
Alcan Aluminium Limited	5.5	229.1	Imperial Oil Limited	3.1	76.0
Fairfax Financial Holdings Limited	0.4	226.5	BC TELECOM Inc.	1.8	74.4
Suncor Energy Inc.	4.3	199.5	George Weston Limited	1.2	69.3
Canadian National Railway Company	2.5	195.8	Hutchison Whampoa Limited	6.3	68.4
MacMillan Bloedel Limited	11.9	182.4	Moore Corporation Limited	4.0	67.5
Magna International Inc.	1.9	181.6	MacKenzie Financial Corporation	3.2	66.9
Encal Energy Ltd.	31.1	177.5	EdperBrascan Corporation	3.1	66.6
MetroNet Communications Corp.	3.4	175.7	Telecom Italia SpA	5.7	65.4
Sun Media Corporation	7.6	160.0	Gulf Canada Resources Limited	14.1	63.4
Newcourt Credit Group Inc.	2.9	156.7	Manitoba Telecom Services Inc.	3.2	63.0
Petro-Canada	8.8	142.4	Ballard Power Systems Inc.	1.5	61.2
Telus Corporation	4.3	139.3	Shaw Communications Inc.	1.6	60.6
Laidlaw Inc.	8.8	136.5	Franco-Nevada Mining Corporation Limited	2.1	60.2
National Bank of Canada	5.5	136.5	HSBC Holdings	1.5	58.8
Newbridge Networks Corporation	2.9	136.1	Nexfor Inc.	9.7	58.7
Potash Corporation of Saskatchewan Inc.	1.4	134.9	National Australia Bank Limited	2.5	58.6
Power Corporation of Canada	4.0	133.1	Geac Computer Corporation Limited	1.5	58.4
Trizec Hahn Corporation	4.1	128.5	Hitachi Ltd.	5.8	57.3
Thomson Corporation, The	3.4	123.6	Noranda Inc.	3.7	56.2
Talisman Energy Inc.	4.5	122.4	Québecor Printing Inc.	1.7	55.2
Enbridge Inc.	1.7	119.9	Le Groupe Vidéotron Ltée	2.4	55.1
Placer Dome Inc.	6.8	119.4	Donohue Inc.	1.9	54.7
NOVA Chemicals Corporation	5.9	117.1	Methanex Corporation	6.8	54.5
Alberta Energy Company Ltd.	3.5	114.8	Novartis AG	0.02	53.7
BioChem Pharma Inc.	2.3	100.2	Inco Limited	3.1	53.0
Canadian Tire Corporation Limited	2.4	98.3	Great-West Lifeco Inc.	2.0	52.6
Nokia AB (OY)	0.5	97.6	ATI Technologies Inc.	3.0	51.8



## CORPORATE SHARES

(Millions)

<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>
Sears Canada Inc.	2.8	50.6	Sony Corporation	0.3	35.5
Bayer AG	0.8	50.2	Telesystem International Wireless Inc.	1.8	35.0
Singapore Airlines Ltd.	4.5	50.0	Maritime Telegraph and Telephone Company, Limited	1.0	34.9
Euro-Nevada Mining Corporation	2.0	49.9	Mannesmann AG	0.2	34.7
BTR plc	15.7	49.1	Hudson's Bay Company	1.8	34.7
Kinross Gold Corporation	13.5	47.7	MDS Inc.	1.2	34.4
G.T.C. Transcontinental Group Ltd.	3.2	47.5	National Westminster Bank PLC	1.2	34.4
Co-Steel Inc.	3.7	46.7	Nova Scotia Power Inc.	1.8	33.6
Swatch Group AG, The	0.05	46.4	CanWest Global Communications Corp.	1.7	33.3
Investors Group Inc.	1.7	45.7	Jardine Strategic Holdings Ltd	15.0	33.2
Canadian Natural Resources Limited	2.0	45.5	Alcatel	0.2	32.8
Telefonos de Mexico SA	0.6	45.3	Dofasco Inc.	1.7	32.6
Goldcorp Inc.	5.2	45.1	Unidanmark A/S	0.2	32.6
Banque Nationale de Paris	0.4	44.2	Novo Nordisk A/S	0.2	32.6
The News Corporation Limited	4.6	43.6	BC Gas Inc.	1.1	32.5
Tele Danmark A/S	0.2	43.6	Nestle SA	0.01	32.4
Telefonica S.A.	1.3	43.4	UPM-Kymmene Oyj	0.8	32.3
ABN Amro Holding NV	1.3	43.2	Fiat SpA	6.5	32.1
Matsushita Electric Works, Ltd.	1.7	42.9	Fort Chicago Energy Partners L.P.	5.1	31.6
Axa-UAP	0.2	42.9	Cameco Corporation	1.1	31.5
Johnson Electric Holdings Ltd.	10.8	42.6	Swire Pacific Ltd.	4.7	31.4
Deutsche Bank AG	0.5	42.2	Linamar Corporation	1.2	30.7
Poco Petroleum Ltd.	3.3	42.2	YPF Sociedad Anonima	0.7	30.5
Iberdrola S.A.	1.4	41.4	Swisscom AG	0.05	30.5
CGI Group Inc., The	1.4	40.9	Shell Transport & Trading Company	3.2	30.3
Cheung Kong (Holding) Ltd.	3.7	40.9	Fortis AG	0.1	30.2
Deutsche Telekom AG	0.8	40.6	JDS FTEL Inc.	0.8	30.0
Cognos Incorporated	1.0	38.9	Koninklijke KPN NV	0.4	29.9
Svenska Handelsbanken	0.6	38.8	BG plc	3.1	29.6
Rogers Communications Inc.	2.8	38.7	Nintendo Company Ltd.	0.2	29.0
Hong Kong Telecommunications Ltd.	14.4	38.6	Teleglobe Inc.	0.5	29.0
Rio Algom Limited	2.4	38.6	Coles Myer Limited	3.6	28.7
Abitibi-Consolidated Inc.	2.7	38.3	Royal Group Technologies Limited	0.8	28.2
Fuji Photo Film	0.7	37.9	Telecomunicacoes Brasileiras S.A.	0.3	28.0
Australia & New Zealand Banking Group Limited	3.7	37.4	Barclays PLC	0.8	28.0
British Energy PLC	2.1	37.2	United Utilities plc	1.3	27.8
BOC Group plc	1.7	36.9	Mitel Corporation	2.4	27.7
Onex Corporation	0.8	36.9	Koninklijke (Royal) Philips Electronics N.V.	0.3	27.3
Veba AG	0.4	36.3	Fletcher Challenge Canada Limited	1.6	27.2
Canadian Utilities Limited	0.7	35.7	Broken Hill Proprietary Company Limited	2.4	27.0
ING Groep N.V.	0.4	35.6	Molson Companies Limited, The	1.2	27.0
Canadian Occidental Petroleum Ltd.	2.2	35.6	Tate & Lyle PLC	3.3	26.8

## CORPORATE SHARES

(Millions)

<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>	<i>Security Name</i>	<i>Shares</i>	<i>Fair Value \$</i>
Electrolux AB	1.0	26.8	Leitch Technology Corporation	0.6	23.7
Thames Water plc	0.9	26.6	Intertape Polymer Group Inc.	0.6	23.5
Atco Ltd.	0.7	26.6	Trimark Financial Corporation	1.1	23.3
Daiichi Pharmaceutical Co., Ltd.	1.0	26.5	Teva Pharmaceutical Industries Ltd.	0.4	22.9
Biovail Corporation International	0.5	26.4	Rio Alto Exploration Ltd.	1.5	22.8
Acktion Corporation	2.3	26.3	Diageo plc	1.3	22.5
SGS Société Générale de Surveillance Holding SA	0.02	26.1	Call-Net Enterprises Inc.	1.6	22.5
Shell Canada Limited	1.1	26.1	Bentall Corporation	1.4	22.5
Imax Corporation	0.5	25.8	TLC The Laser Center Inc.	0.7	22.4
Oxford Properties Group Inc.	1.4	25.4	General Electric Company plc	1.6	22.3
British Steel plc	11.1	25.2	Allied Irish Banks plc	0.8	22.1
Metro-Richelieu Inc.	1.3	24.9	Akzo Nobel N.V.	0.3	22.0
Telstra Corporation Limited	3.5	24.9	Buffetti SpA	4.2	21.8
Electrabel SA	0.04	24.9	Intrawest Corporation	0.8	21.6
Total SA	0.2	24.8	BPB PLC	3.7	21.6
Kurita Water Industries Ltd.	1.1	24.8	Sun Hung Kai Properties Ltd.	1.9	21.4
BCE Mobile Communications Inc.	0.6	24.7	Development Bank of Singapore Limited	1.5	21.3
Railtrack Group PLC	0.6	24.4	Tomkins plc	2.8	21.2
Baton Broadcasting Incorporated	1.1	24.4	Endesa S.A.	0.5	21.1
KBC Bancassurance Holding	0.2	24.4	Rothmans Holdings Limited	1.9	21.0
Pechiney SA	0.5	24.4	Trilon Financial Corporation	1.9	20.9
Celestica Inc.	0.6	24.3	Kyocera Corporation	0.3	20.5
Westaim Corporation, The	3.2	23.9	Vincor International Inc.	1.5	20.4
Four Seasons Hotels Inc.	0.5	23.8	DSM NV	0.1	20.3
CINAR Corporation	0.6	23.8	AGF Management Limited	0.9	20.2
CAE Inc.	2.9	23.8	Ranger Oil Limited	2.9	20.0

## CONVERTIBLE AND EXCHANGEABLE DEBENTURES

(\$ Millions)

<i>Security Name</i>	<i>Par Value</i>	<i>Fair Value</i>
Brookfield Properties 6.0% Due February 14, 2007	15.5	21.0
PDFB Investments Inc. 3.25% Due March 12, 2018	54.4	73.3
Power Financial Corporation 8.0% Due April 30, 2014	85.5	256.8
Telecom Telesystem Ltd. 5.44% Due November 18, 2002	21.3	168.5

## REAL ESTATE PORTFOLIO

Property	Total Square Footage	Effective % Ownership
	(in thousands)	
Regional Shopping Centres		
Fairview Park Mall, Kitchener	745	75.0%
Georgian Mall, Barrie	532	75.0%
Hillcrest Mall, Richmond Hill	548	100.0%
Intercity Shopping Centre, Thunder Bay	447	100.0%
Markville Shopping Centre, Markham	971	100.0%
New Sudbury Centre, Sudbury	491	100.0%
Polo Park Mall, Winnipeg	1,130	100.0%
Southland Mall, Regina	383	100.0%
Chinook Centre, Calgary	1,117	100.0%
Richmond Centre, Vancouver	488	100.0%
Office and Other Properties		
1 Queen Street East and 20 Richmond Street East, Toronto	518	50.0%
Granville Square, Vancouver	411	100.0%
The Station, Vancouver	162	100.0%
Waterfront Centre, Vancouver	408	100.0%
Shell Centre, Calgary	692	50.0%
Granville Square II, Vancouver	—	50.0%

## PRIVATE COMPANIES AND PARTNERSHIPS

Absolute Return Fund Ltd.	Morgan Stanley Real Estate Fund III
Apaquogue Limited	International L.P.
ARC Canadian Energy Venture Fund	Newcastle Capital Management Inc.
BC European Capital V	Numeric ValHedge Leveraged Offshore Fund
BC European Capital VI	Limited
DLJ Merchant Banking Partners II, L.P.	Philip Utilities Management Corporation
Elis S.A.	Phoenix Equity Partners II
Enron Energy Services, Inc.	Providence Equity Partners Fund II L.P.
Exxel Capital Partners V, L.P.	Providence Media Partners, L.P.
Forest Global Convertible Fund, Ltd.	RNG Group Inc.
Hicks, Muse, Tate & Furst Latin America Fund, L.P.	Schroder Asia Pacific Fund II
HMTF – Argentine Media Investments L.P.	The Macerich Company
JPM Nippon Neutral Fund, Ltd.	Trinity 1 Fund L.P.
Maple Leaf Sports & Entertainment Ltd.	Westjet Airlines Ltd.
Maple Partners Financial Group Inc.	WGTC Limited

# NINE-YEAR

## REVIEW

FOR THE YEAR ENDED DECEMBER 31

(\$ Millions)	1998	1997	1996	1995	1994	1993	1992	1991	1990
<b>CHANGE IN NET ASSETS</b>									
<b>Income</b>									
Investment income	\$ 5,137	\$ 7,246	\$ 7,436	\$ 5,656	\$ 528	\$ 5,907	\$ 2,145	\$ 3,843	\$ 1,031
Contributions									
Members	607	582	610	615	674	647	655	597	526
Province of Ontario	653	649	673	669	704	712	740	663	587
– special payments	492	456	152	—	—	—	438	270	187
Repayment of refunds and transfers	5	9	10	21	58	42	56	54	33
<b>Total Income</b>	<b>6,894</b>	<b>8,942</b>	<b>8,881</b>	<b>6,961</b>	<b>1,964</b>	<b>7,308</b>	<b>4,034</b>	<b>5,427</b>	<b>2,364</b>
<b>Expenditures</b>									
Benefits paid	2,103	1,802	1,520	1,261	1,130	1,001	921	829	760
Investment expenses	67	59	40	30	25	20	14	7	1
Client service expenses	32	31	29	27	26	24	23	18	19
Distribution of gain	—	—	—	—	—	325	—	—	—
<b>Total Expenditures</b>	<b>2,202</b>	<b>1,892</b>	<b>1,589</b>	<b>1,318</b>	<b>1,181</b>	<b>1,370</b>	<b>958</b>	<b>854</b>	<b>780</b>
<b>INCREASE IN NET ASSETS</b>	<b>\$ 4,692</b>	<b>\$ 7,050</b>	<b>\$ 7,292</b>	<b>\$ 5,643</b>	<b>\$ 783</b>	<b>\$ 5,938</b>	<b>\$ 3,076</b>	<b>\$ 4,573</b>	<b>\$ 1,584</b>
<b>NET ASSETS</b>									
<b>Investments</b>									
Fixed income	\$14,495	\$11,873	\$11,688	\$13,573	\$12,062	\$18,117	\$19,464	\$19,215	\$18,129
Equities – Canadian	17,613	19,433	17,367	12,218	9,943	7,510	3,217	2,618	520
– Foreign	24,416	20,081	16,005	12,287	10,714	7,035	3,253	1,796	807
– Real Estate	1,582	1,561	1,272	925	694	608	451	180	—
	<b>58,106</b>	<b>52,948</b>	<b>46,332</b>	<b>39,003</b>	<b>33,413</b>	<b>33,270</b>	<b>26,385</b>	<b>23,809</b>	<b>19,456</b>
Receivable from									
Province of Ontario	1,233	1,262	1,286	1,308	1,338	1,362	1,323	1,190	945
Other assets	5,391	8,537	3,293	1,586	622	36	72	10	—
<b>Total assets</b>	<b>64,730</b>	<b>62,747</b>	<b>50,911</b>	<b>41,897</b>	<b>35,373</b>	<b>34,668</b>	<b>27,780</b>	<b>25,009</b>	<b>20,401</b>
Liabilities	(5,559)	(8,268)	(3,482)	(1,760)	(879)	(957)	(7)	(312)	(277)
<b>Net Assets</b>	<b>\$59,171</b>	<b>\$54,479</b>	<b>\$47,429</b>	<b>\$40,137</b>	<b>\$34,494</b>	<b>\$33,711</b>	<b>\$27,773</b>	<b>\$24,697</b>	<b>\$20,124</b>
Smoothing reserve	(4,788)	(5,578)	(4,416)	(1,907)	(252)	(2,947)	(414)	(883)	709
Actuarial value of net assets	54,383	48,901	43,013	38,230	34,242	30,764	27,359	23,814	20,833
Accrued pension benefits	48,636	44,457	41,833	38,744	36,848	33,998	30,781	27,479	24,391
<b>Surplus (Deficiency)</b>	<b>\$ 5,747</b>	<b>\$ 4,444</b>	<b>\$ 1,180</b>	<b>\$ (514)</b>	<b>\$ (2,606)</b>	<b>\$ (3,234)</b>	<b>\$ (3,422)</b>	<b>\$ (3,665)</b>	<b>\$ (3,558)</b>
<b>PERFORMANCE (%)</b>									
Rate of return	9.9	15.6	19.0	16.9	1.7	21.7	8.9	19.6	5.6
Benchmark	11.9	15.6	18.1	17.2	(0.3)	20.5	8.0	15.4	—
Long-term goal	5.5	5.2	6.7	6.2	4.7	6.2	6.6	8.3	9.5



# CORPORATE DIRECTORY



## BOARD OF DIRECTORS

*From left to right,  
seated to standing:*

### Robert W. Koefoote

Former President of the  
Toronto-Hamilton Bank.  
Chair of the Investment  
Committee.

### G. Edward Medland

Former Chief Executive  
Officer of  
Wood Gundy Inc.  
*Chair of the Board*

### John H. Bennett

President of John H.  
Bennett & Associates Ltd., a  
consulting firm specializing in  
strategy, planning, and organiza-  
tional development.  
*Chair of the Board and  
Chairman Emeritus*

### Roger D. Wilson

Former and Vice President,  
Foster Wheeler & Godfrey  
in Toronto

### Geoffrey W. Clarkson

Chairman Emeritus and  
former senior partner with  
Lester & Young

### Aan Huisman

Executive speaker, speaker,  
editor, and contributor who has  
written three books including  
*When Money is a Game* (The  
Macmillan Co. Press of 1986)

### Gary Forster

Chartered accountant and  
founding partner of the  
accounting firm Forster Price  
Associates, and a past presi-  
dent of the Canadian General  
Accounting Association in  
Ontario

### Larry S. Givner

Former Vice President at  
Human Resources and Pay-  
Life Administrative Company in  
Canada and President,  
Greiner Thermal & Analytical

### David J. Verner

Former Secretary of the  
Ontario Public School  
Boards, Education Finance  
Board (merged into OPSC  
Board) and Ontario Treasurer

## INVESTMENT COMMITTEE

Robert W. Koefoote, *Chair*  
John H. Bennett  
Geoffrey W. Clarkson  
Aan Huisman  
Larry S. Givner  
David J. Verner  
G. Edward Medland  
Lawrence Medland  
Roger D. Wilson

## AUDIT AND ACTUARIAL COMMITTEE

John H. Bennett, *Chair*  
Geoffrey W. Clarkson  
Aan Huisman  
Larry Verner  
Roger D. Wilson

## BENEFIT ADJUDICATION COMMITTEE (APPEALS)

David L. Farnham, *Chair*  
Geoffrey W. Clarkson  
Aan Huisman  
Larry Verner  
John H. Bennett  
John Blackmore  
William Klammer  
Marion Hines  
Marion Hines  
David Farnham  
Vernon Hines  
Wendy Hines  
Gail Whelan

For information, questions and  
suggestions go to:  
www.torontohamiltonbank.com  
or contact the following:  
William L. Klammer,  
Vice-President, Appeals, at  
416-593-5111

www.torontohamiltonbank.com

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Canada T: 416-593-5111  
Fax: 416-593-5141  
www.mpp.ca

## CORPORATE DIRECTORY

**President and Chief  
Executive Officer**  
David L. Farnham

**President**  
William L. Klammer  
Bryan Hines

**Vice President**  
Vernon Hines  
Helen Hines

**Branch Banking**  
Tommy Brown, *Manager* (in  
charge)

**Head Office**  
Larry Verner, *Branch Manager*

**Quantitative Investment**  
Marion Hines  
Marion Hines

**Investment and Risk  
Management**  
Tommy Brown, *Branch Manager*

**Investment and Insurance**  
Tommy Brown, *Branch Manager*

**Client and Investment  
Services**  
Marion Hines, *Branch Manager*  
Gail Whelan

**Client Services**  
Vernon Hines  
Helen Hines

**Investment Information  
Services**  
Vernon Hines, *Branch Manager*

**Human Resources and  
Public Affairs**  
Vernon Hines, *Branch Manager*

**Finance**  
Vernon Hines, *Branch Manager*

**Law**  
Vernon Hines, *Branch Manager*  
Vernon Hines  
Vernon Hines

**Investment**  
Vernon Hines, *Branch Manager*

1999

2000

2001

2002

2003

2004

2005

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2007

2008

2009

2010

2011

CAZON  
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Teacher's  
Pension Plan  
Board

# Annual Report 1999

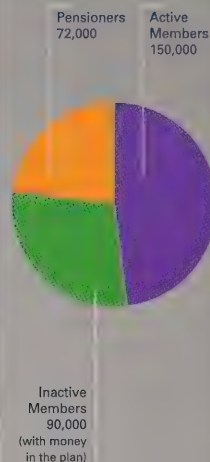




## Corporate Vision

Outstanding  
Service  
Today,  
Retirement  
Security  
Tomorrow

## Member Profile



## Contents

- |   |  |
|---|--|
| <p><b>2 FINANCIAL HIGHLIGHTS</b></p> <p><b>4 CHAIR'S REPORT</b></p> <p><b>6 PRESIDENT'S REPORT</b></p> <p><b>10 PERSONALIZED MEMBER SERVICES</b><br/> Emphasis on personal attention<br/> Prompt service<br/> Continuous improvement<br/> Future directions</p> <p><b>14 TOTAL FUND INVESTMENT MANAGEMENT</b><br/> Investment targets<br/> Investment management team<br/> Total fund focus<br/> Index banking<br/> Innovative index management<br/> Effective use of derivatives<br/> Actively managed investments<br/> Inflation-hedge investments</p> <p><b>22 MANAGEMENT'S DISCUSSION &amp; ANALYSIS</b><br/> Pension plan objectives<br/> Contribution rates<br/> Year-end financial position<br/> Matching assets and liabilities<br/> Asset-mix policy<br/> Investment performance<br/> Risks and risk management<br/> Retirement compensation arrangement</p> | <p><b>33 ACTUARIAL VALUATIONS</b><br/> Partnership<br/> Use of past funding gains<br/> Improved benefits<br/> Use of future funding gains<br/> Funding issues<br/> Use of surplus</p> <p><b>37 FINANCIAL STATEMENTS AND NOTES</b></p> <p><b>59 STATEMENT OF CORPORATE GOVERNANCE PRACTICES</b><br/> Mandate of the pension plan corporation<br/> Composition of board of directors<br/> Board committees<br/> Effectiveness of board<br/> Independence of board<br/> Role of management<br/> Management performance<br/> Accountability and communications</p> <p><b>63 INVESTMENTS OVER \$20 MILLION</b></p> <p><b>68 TEN-YEAR REVIEW</b></p> <p><b>CORPORATE DIRECTORY</b></p> |
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## *Corporate Profile*

THE ONTARIO TEACHERS' PENSION PLAN BOARD IS RESPONSIBLE FOR THE FUTURE RETIREMENT INCOME OF APPROXIMATELY 150,000 ELEMENTARY AND SECONDARY SCHOOL TEACHERS, 72,000 RETIRED TEACHERS AND THEIR SURVIVORS, AND 90,000 INACTIVE TEACHERS WITH ENTITLEMENTS IN THE PLAN. THE PLAN IS SPONSORED BY A PARTNERSHIP BETWEEN THE ONTARIO GOVERNMENT AND THE PLAN MEMBERS, REPRESENTED BY THE ONTARIO TEACHERS' FEDERATION.

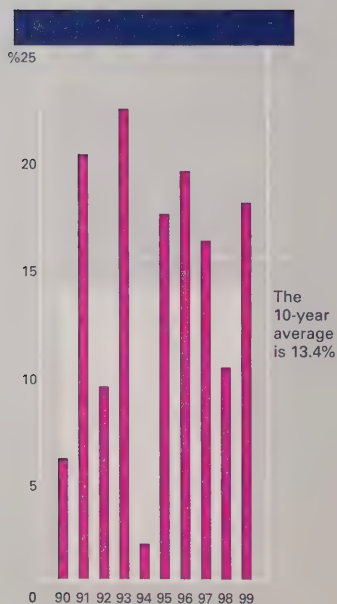
THE PENSION BOARD'S CURRENT ASSET-MIX POLICY IS 65 PERCENT EQUITIES, SUCH AS SHARES IN PUBLIC AND PRIVATE COMPANIES AND EQUITY-RETURN DERIVATIVE CONTRACTS; 20 PERCENT FIXED-INCOME SECURITIES, LARGELY FEDERAL AND ONTARIO GOVERNMENT BONDS AND DEBENTURES; AND 15 PERCENT INFLATION-HEDGE INVESTMENTS SUCH AS REAL ESTATE, REAL-RATE BONDS AND COMMODITY-RETURN DERIVATIVE CONTRACTS.

AT THE END OF 1999, ADJUSTED NET ASSETS EXCEEDED THE COST OF FUTURE PENSIONS, RESULTING IN A FINANCIAL STATEMENT SURPLUS OF \$8.9 BILLION.



## Financial Highlights

### Rate of Return



As at December 31

### INVESTMENT PERFORMANCE

Rate of return on investments (%)	1999	1998
Annual	17.4%	9.9%
Composite benchmark	17.6	11.9
Four-year average	15.4	15.3
Four-year benchmark	15.8	15.7

### Average annual compound rates of return (%)

	1 yr	2 yr	3 yr	4 yr	5 yr	10 yr
Our return	17.4	13.6	14.2	15.4	15.7	13.4
Benchmark	17.6	14.7	15.0	15.8	16.1	11.2

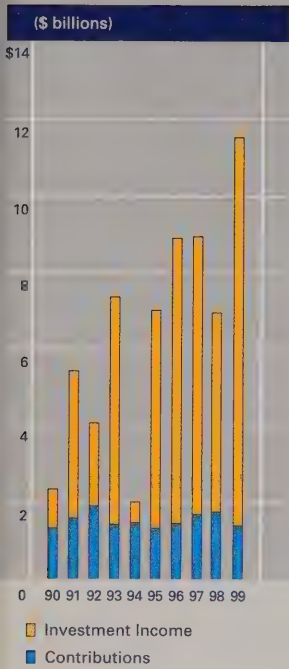
### SURPLUS

(\$ Billions)	1999	1998
Net assets	\$68.3	\$59.1
Smoothing reserve*	7.3	4.8
Actuarially adjusted net assets	61.0	54.3
Cost of future pensions	52.1	48.6
Surplus	\$ 8.9	\$ 5.7

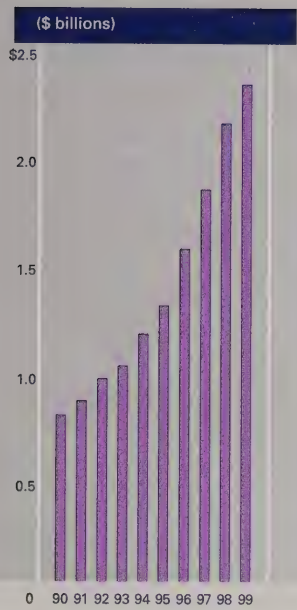
\*We smooth gains (or losses) over five years to reduce the impact of market volatility on plan surplus. The smoothing reserve consists of investment gains in excess of the actuarial assumptions used in the best estimate valuation.

All numbers in this annual report include the effect of derivatives unless stated otherwise.

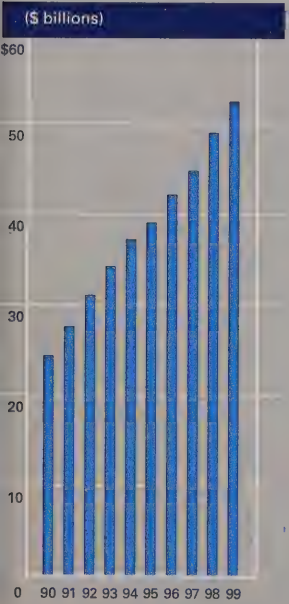
Income



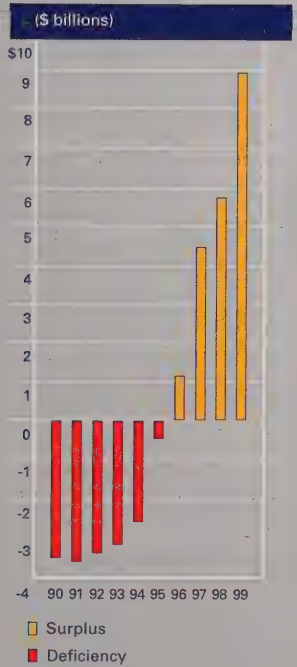
Benefits Paid



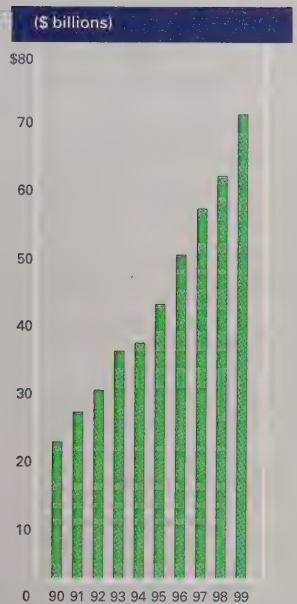
Cost of Future Pensions  
as at December 31



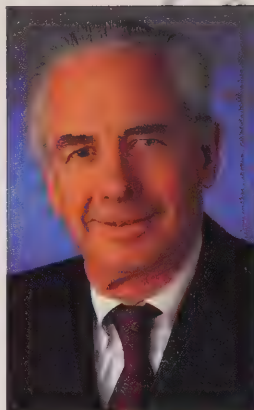
Surplus  
as at December 31



Net Assets  
as at December 31



# Staying focused on what's important to plan members



Robert W. Korthals  
*Chair*

## ***Chair's Report***

It is a great privilege for me to succeed Ted Medland as Chair of the Ontario Teachers' Pension Plan Board. He served in that capacity for four years and was the last of the founding directors appointed in 1990 when the pension board was established as an independent corporation.

Ted's long career as an investment dealer proved invaluable as the organization entered more complex investment areas in pursuit of better returns. His steady hand during a period of rapid change kept us on course in serving the best interests of plan members.

### **OTHER BOARD CHANGES**

Also leaving the board in 1999 was Roger Wilson, a lawyer who provided sound advice during his two-year term as a director. Board vacancies were filled by Ralph Lean, Q.C., a partner in the law firm of Cassels Brock & Blackwell, and John Lane, recently retired chief investment officer of Sun Life Assurance Company of Canada.

While board membership has now turned over completely since 1990, the staggered terms of directors ensure continuity. The directors have the knowledge and experience necessary for the effective governance of an organization that provides both investment and member services in response to the pension entitlements of

elementary and secondary school teachers and others in the education field.

### **MANAGEMENT STABILITY**

Following the initial team-building during the first half of the 1990s, our senior management has remained relatively stable since 1995, although we continue to add investment and financial specialists.

This stability is important at a time of increased competition for investment managers. In recent years, more pension funds have adopted actively managed investment programs and investment firms have created a plethora of new mutual funds. In addition, market-focused pension funds continue to emerge at the federal level, such as the Canada Pension Plan Investment Board and the Public Sector Investment Board representing the pension plans of the federal public service, RCMP and armed forces.

To ensure all staff focus on what is important to plan members, we provide performance-based incentives for the entire workforce, including bargaining unit employees.

### **MANAGING THE FUNDING SURPLUS**

It is interesting to recall that on January 1, 1990 the plan had a \$7.8 billion unfunded liability. Since then, innovative



## Board of Directors

investment strategies have combined with unusually strong capital markets to increase the value of assets at an extremely rapid pace. At the same time, unusually low inflation has combined with stable salaries to slow the growth in the cost of future benefits.

The result was \$12.5 billion in actuarial gains from 1990 to 1998 that the Ontario government and Ontario Teachers' Federation allocated to eliminate the unfunded liability, improve benefits for pensioners, and introduce early retirement incentives.

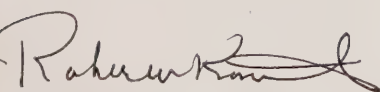
A career in banking has taught me there is value in a large financial institution maintaining sufficient capital reserves to ensure financial stability and public confidence in the event of adverse market developments. Market returns have been extraordinarily high over the last decade. Our assets will not always grow faster than our obligations to plan members. In those circumstances, the surplus will decline and a return to deficit is conceivable.

We are pleased that the pension board has developed sophisticated tools to analyze policy alternatives and help the partners to reach decisions on surplus and benefits policies. As discussed on page 35, these funding issues will directly influence the pension board's investment and risk management policies.

Finally, the pension board remains committed to creating value beyond the funding requirement, and the directors will continue to encourage the partners to build a funding surplus as a safety cushion so that the costs of current and new benefits do not outpace realistic expectations of long-term asset growth.

### ACKNOWLEDGEMENTS

On behalf of the board of directors, I thank the staff for another year of exceptional investment returns and first-rate member services. The professionalism of the pension board in carrying out its mandate is admirable and deserves to be a source of pride among the teachers of Ontario.



**ROBERT W. KORTHALS**  
Chair



**ROBERT W. KORTHALS**  
Former President of the Toronto-Dominion Bank  
*Chair of the Board*



**JALYNN H. BENNETT**  
President of Jallynn H. Bennett & Associates Ltd., a consulting firm specializing in strategic planning and organizational development  
*Chair of the Investment Committee*



**GEOFFREY W. CLARKSON**  
Chartered accountant and former senior partner with Ernst & Young  
*Chair of the Benefits Adjudication Committee*



**ANN FINLAYSON**  
Journalist, speaker, freelance editor and consultant, she has written three books including, *Whose Money is it Anyway? The Showdown on Pensions* (1988)



**LUCY G. GREENE**  
Former Vice-President of Human Resources with Sun Life Assurance Company of Canada and President, Greene Thomas & Associates  
*Vice-Chair of the Benefits Adjudication Committee*



**JOHN S. LANE**  
Former Senior Vice-President of Investments for Sun Life Assurance Company of Canada and a Chartered Financial Analyst



**RALPH E. LEAN, Q.C.**  
Senior partner with the law firm Cassels Brock & Blackwell in Toronto



**DAVID J. LENNOX**  
Former Secretary of the Ontario Public School Teachers' Federation, former school principal  
*Chair of the Audit and Actuarial Committee*

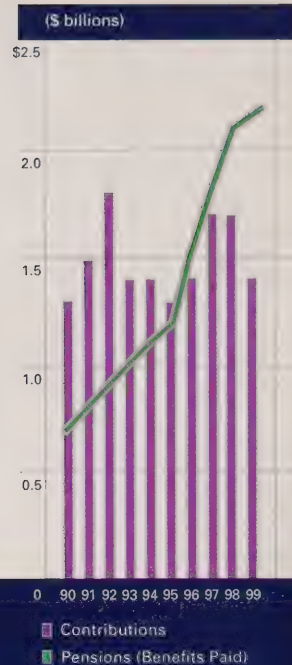


**GARY PORTER**  
Chartered accountant and founding partner of the accounting firm, Porter Héту International, and a past president of the Certified General Accountants Association of Ontario



Claude Lamoureux  
President and  
Chief Executive Officer

## Contributions vs Pensions



## President's Report

The plan enjoyed strong growth in 1999 with \$10.1 billion in investment income that helped to push the value of net assets above \$68.3 billion. The total fund return of 17.4 percent was much improved over the 9.9 percent earned in 1998. The key reason was stock market performance. The Canadian market was a top world performer for the first time in many years, and the recovery in emerging markets improved foreign returns. The plan's real estate assets also did very well.

We closed 1999 in a sound financial position. Net assets exceeded the value of accrued pensions to provide a year-end surplus of \$8.9 billion. (This surplus based on our financial statements differs substantially from the funding surplus, as discussed on page 33.)

### BENEFITS VS. CONTRIBUTIONS

In 1999 we paid out \$2.3 billion in total benefits, or \$175 million more than in 1998. About 90 percent of payments were pensions, with the remainder commuted value transfers to teachers leaving the profession, death benefits, and refunds.

Active members and the government paid \$1.3 billion in regular contributions in 1999. The gap between pension payments and current contributions, which has existed since 1996, will continue to widen. The plan's active teacher membership declined by about 4,000 to 150,000 while the number of pensioners rose to 72,000.

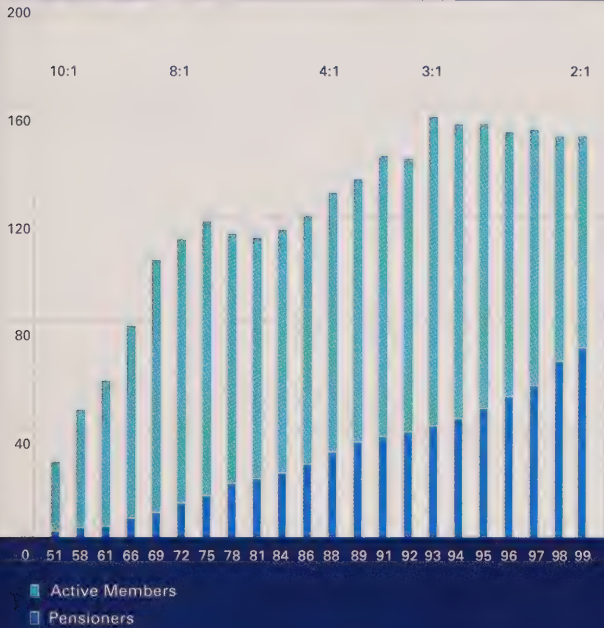
Of the 15,500 teachers who retired during the past two years, 10,500 took advantage of the early retirement program introduced in 1998. The program is scheduled to continue until December 31, 2002 and allows teachers whose age and qualifying service add up to 85 to retire on an unreduced pension instead of waiting until they reach the 90 factor.

### MATURING PLAN

The number of retired teachers and survivors receiving entitlements increased by 5,000 during 1999. Benefit payments will grow rapidly as the pensioner population expands in the next few years, because of the large

## Ratio of Active Members and Pensioners

(thousands)



number of active members in the 45 to 55 age range. The plan's maturation can be seen in the declining ratio of active members to pensioners, a trend that will continue. This maturation is also evident in the increasing cost of pensions compared to contributions, making the plan more vulnerable to poor investment markets.

Retirees are also living longer and this trend will continue. Women retiring at 57 have a life expectancy of 27 years, compared with 24 years in 1970, when many teachers retiring today entered the profession. For men at 57, life expectancy is 22 years, versus 19 years in 1970. New retirees are receiving larger pensions – on average \$38,000 for an unreduced pension today, compared with \$5,500 in 1970. (Thanks to indexing, that 1970 pension is worth about \$23,500 today.) Adding to long-term costs are the current early retirement program and the improvement in pensions at age 65. If inflation recurs, the long-term cost of indexed pensions will rise sharply.

Clearly active members have a great deal at stake. A career teacher with an 85 factor has the equivalent of roughly \$600,000 in the plan. We are entrusted with making sure that value is sufficient to pay an indexed stream of retirement income for the remainder of the member's life.

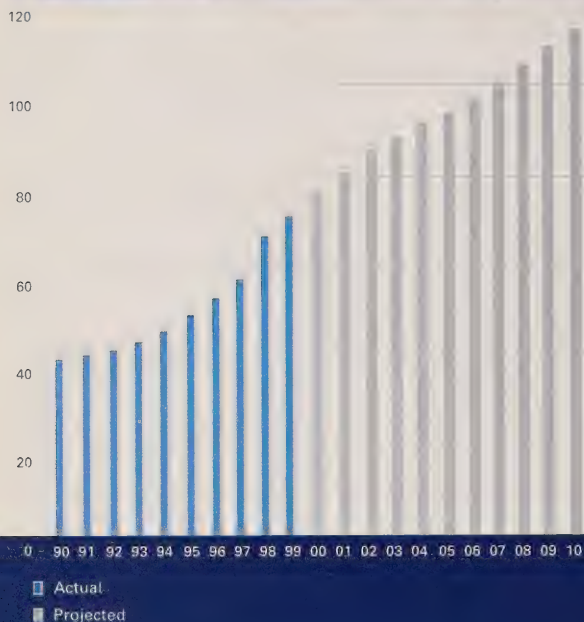
## FOCUSED BUSINESS ORGANIZATION

To do that, we have created a business organization that responds to high standards of performance in investment management and member services. We have recruited a highly skilled workforce with the knowledge and training to deliver the best services possible. Our investment resources are organized to achieve total fund returns above what the market alone can deliver so that a surplus exists as protection against volatile markets.

We pride ourselves on being an efficient organization that last year cost \$123 million to operate. Ongoing administrative costs have remained stable for several years at \$104 per member, and investment expenses at 13 cents per \$100 of assets are among the lowest in the

## Number of Pensioners

(thousands)



pension services industry. These costs are tabulated on page 55.

We have a good investment record, generating a 13.4 percent average rate of return for the past 10 years. In addition, plan members have given our member services a high satisfaction rating for each of the past four years.

### ACKNOWLEDGEMENTS

Our success in maximizing total fund returns and in providing improved member services is due to the efforts of our 500 employees. I thank them for always striving to do the best job possible for all plan members.

CLAUDE LAMOUREUX

President and Chief Executive Officer



Personal  
attention to  
each member's  
pension  
benefits



**Personalized Member Services**



**Rosemarie McClean**

*Vice-President, Client Services*

*and Allan Reesor,*

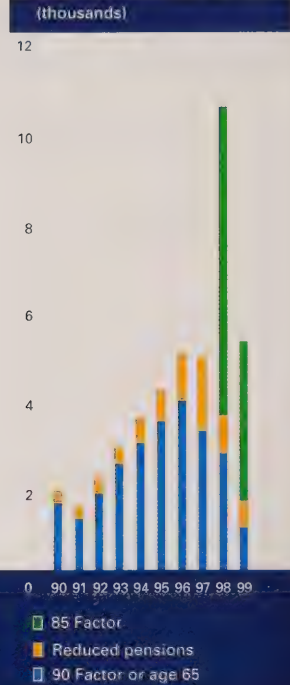
*Senior Vice-President,*

*Member Services and Chief*

*Information Officer*

# Personal attention to each member's pension benefits

## Retirement Pensions



### Personalized Member Services

We are committed to delivering improved service to each plan member. These services include pension payments, pension estimates, purchases of credit, commuted values and plan termination options to approximately 72,000 retired teachers and survivors, 150,000 active members, and 90,000 inactive members.

Since 1993, we have invested more than \$30 million in building what we believe is the finest customer service organization in the pension fund industry. This has involved creating a new service delivery system, training and retraining staff to best business practices, installing new information management systems, and ensuring data is historically accurate and complete for each member.

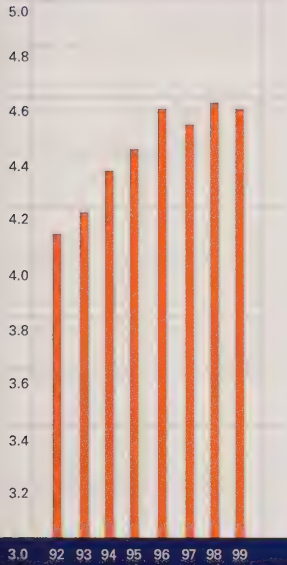
Our use of modular systems components ensures flexibility in adapting service delivery to unexpected client demands. For example, the introduction of early retirement incentives in 1998 doubled member requests for pension estimates to 23,500 enquiries, resulting in twice as many

retirements. These volumes returned to more predictable levels in 1999 with 6,300 requests for pension estimates and approximately 5,300 retirements. Advanced information systems enabled us to maintain high service levels during this period.

### EMPHASIS ON PERSONAL ATTENTION

While we make extensive use of advanced technology to improve service and gain cost advantages, the emphasis is on personal attention to each member's needs. Personalized service is delivered by 60 pension benefit specialists. Most contact is by telephone, with a staff specialist assigned to each member to ensure familiarity, continuity and client comfort. We receive more than 150,000 telephone calls and written entitlement requests a year ranging from members trying to cope with the death of a spouse to requests for information on commuted value payouts.

### Quality Service Index (how teachers rate our service)

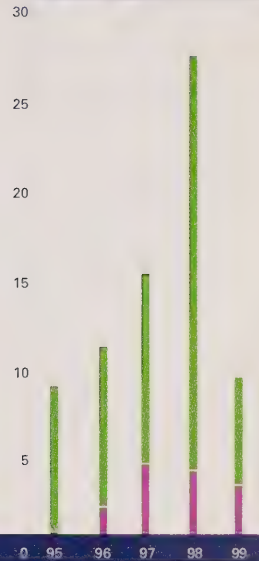


The yearly average of client satisfaction on a scale of 1 to 5

We  
search  
for ways  
to improve  
service

### Pension & Termination Volumes

(thousands)



■ Pension Estimates  
■ Termination Estimates

Personalized service also extends to the field. Our pension benefits specialists participate in workshops throughout Ontario for members approaching retirement and provide them with individual counselling.

### PROMPT SERVICE

By phone or in person, our goal is to resolve every member request, no matter how complicated, within 10 working days. We track production efficiency by measuring the response time of member requests. Requests outstanding more than 10 working days averaged 5,078 in June 1998, following introduction of the 85 factor, but were reduced to an average of 612 cases by the end of 1999.

We also track customer satisfaction through surveys and focus groups and in the last four years received high approval ratings from teachers and pensioners.

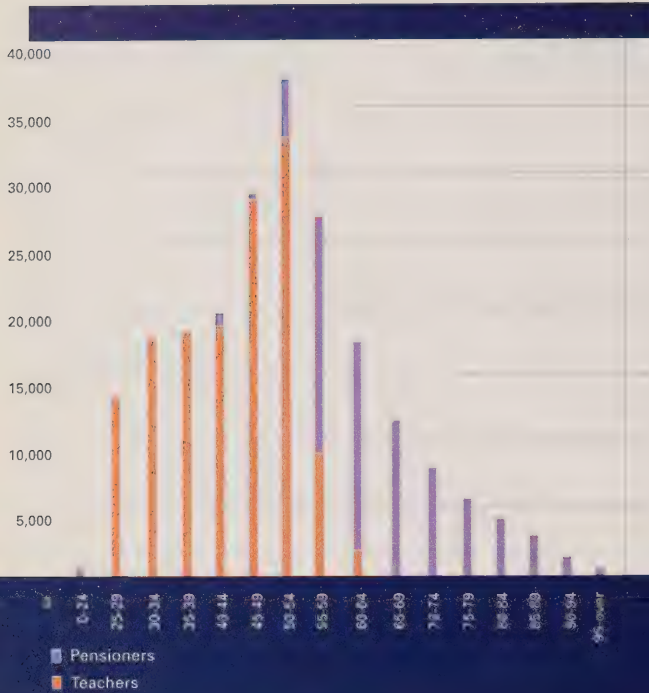
### CONTINUOUS IMPROVEMENT

We continue to search for ways to improve service. Currently, for instance, we deal with 236 employers, mostly school boards, throughout Ontario that supply information on each teacher's service, salary and other pertinent data. The accuracy and frequency of data reporting is critical to our ability to provide prompt personal service. Working with school boards, we are improving the quality and timeliness of member information.

At the end of 1999, we had 19 school boards that employ 42,000 members reporting at each payroll date instead of annually and expect to add another 30,000 members in 2000. Eventually, we want to get information from all active members at each pay date.



## Age Distribution of Teachers and Pensioners



## FUTURE DIRECTIONS

Within the next two years, our goal is for members to be able to access their pension information over the internet so that they can calculate their own entitlement options at their convenience. They will still have – and be encouraged to have – contact with our pension benefits specialists. To ensure all members can access their pension data electronically, we will support the capability at each school to provide access to our internet service.

Members are increasingly paying attention to their personal wealth management and investment options in registered retirement savings plans, mutual funds and other investment vehicles. To keep them advised on their pension status, we are taking a more proactive approach. For example, we will be offering benefit entitlement planning

sessions to members considering retirement or leaving the plan. These sessions in their work and home areas will involve group and one-on-one discussions. We will also take the initiative in contacting individuals to explain the options available to them as the result of certain trigger events, such as payroll changes, leaves of absence, accrued credits, and a change in marital status, or because of plan changes that they might not be aware of.

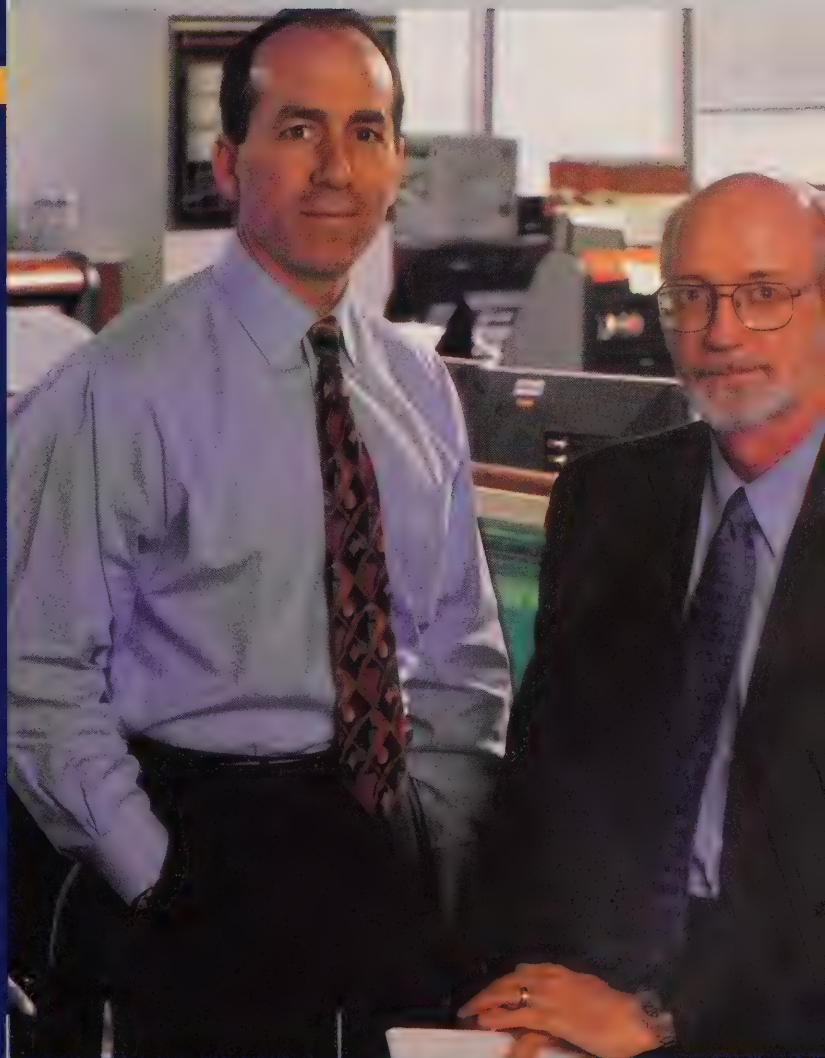
This more vigorous approach is consistent with our corporate vision of “*Outstanding Service Today, Retirement Security Tomorrow*” and will ensure that the teachers’ pension plan is fully committed to exceptional performance in member services.



Finding  
better ways  
to maximize  
asset value



**Total Fund Investment Management**



Neil Petroff,

*Vice-President*

*International Equity*

*Indexes, Fixed Income*

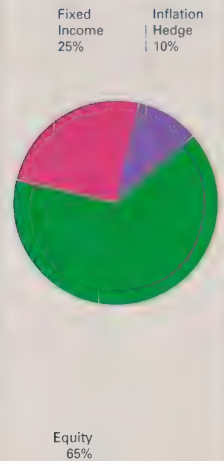
*and Foreign Exchange*

and Robert Berrain,

*Senior Vice-President*

*Investments*

# Finding better ways to maximize asset value



## Total Fund Investment Management

Our approach as an investment manager is the result of a 10-year evolution, driven by the need to always find better ways to maximize the value of invested assets. Our goal is to add to the funding surplus so that the partners can enhance benefits or reduce contributions.

### INVESTMENT TARGETS

Our long-term investment goal is to produce a 4.5 percent annual real rate of return (that is, 4.5 percent above the rate of inflation) to exceed the plan's funding requirement. As investment professionals, we should be able to earn a 5.75 percent real rate of return before costs within the board-approved long-term asset-mix policy from passive investing alone; that is, by investing in portfolios that replicate market indices for stocks, bonds, and commodities.

Beating our passive benchmark and adding value is a challenging target. However, we believe that we can increase the real-rate return before costs to 6.25 percent on average by actively managing as much of the asset base as possible to realize additional value relative to the risks incurred. This involves creating quantitative stock

portfolios, selecting shares in individual undervalued companies, offering merchant banking services, trading bonds, owning real estate, and managing foreign exchange exposure. In particular, we allocate capital to portfolios where we have developed specialized expertise.

Our total fund management style encourages the movement of capital among asset classes and portfolios to earn the best risk-adjusted returns available.

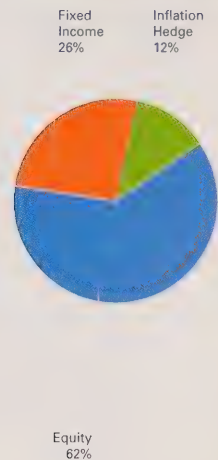
Together, therefore, the choice of asset-mix policy plus a commitment to active investing translates into a management objective to exceed the 4.5 percent goal by 1.75 percent on average over the long term. Based on the current cost of future benefits, this would add more than one billion dollars of real value annually. Over the past 10 years, we have earned an 11.3 percent average annual compounded real rate of return (or 13.4 percent nominally).

### INVESTMENT MANAGEMENT TEAM

We employ more than 80 investment professionals, from portfolio managers, bond traders and stock analysts to

Our  
Research  
Department  
provides analysis  
for the  
asset-mix policy

**Actual Asset-Mix**  
as at December 31, 1999



foreign exchange traders, merchant bankers, real estate specialists and derivative traders. These people track and analyze the daily match between assets and liabilities, manage market risk, and identify attractive markets on a global basis.

About 50 professionals form our investment finance team and support investment staff by ensuring compliance with rigorous controls and procedures. They measure performance, settle transactions, value and calculate the value at risk of all assets daily, and forecast cash requirements. This team leverages technology to deliver comprehensive investment and financial reports on a daily basis, with full investment and financial statements circulated within 10 business days of month-end.

In addition, about 35 professionals are responsible for all technological aspects of our trading, risk management and reporting systems. They keep us in the forefront of technological innovation. An example is a trade management system developed in-house that seamlessly and instantly flows a buy/sell order from portfolio managers to the trading desk and on to the monitoring and accounting systems.

#### TOTAL FUND FOCUS

To keep the focus on total fund returns, we have developed asset/liability models on which we base our asset-mix policy. A committee of senior investment managers meets every other week to review the asset-mix policy and develop a tactical asset allocation response to current market conditions. All investment managers share the responsibility for optimizing total assets and not just their own portfolios. They move capital opportunistically between passive and active asset portfolios to improve overall performance.

We further encourage total fund management by basing a percentage of each investment professional's incentive compensation on total fund results. In the case of investment vice presidents, this represents a sizeable portion of their annual incentive bonus.

#### INDEX BANKING

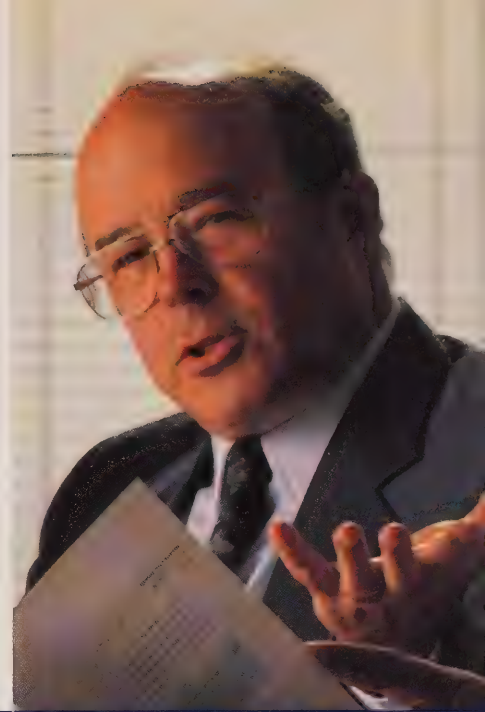
A core concept of our total fund management is investing in index funds. It is cost-efficient for a large investor and



## Investment Vision



We take  
advantage of  
opportunities  
to increase  
expected return



Morgan McCague, Vice-President  
Quantitative Investments

ensures market returns because each index is a proxy for its market.

We deposit capital from other portfolios in index funds until we identify opportunities that can earn above-market returns. If better returns can be gained from active equity investing or merchant banking opportunities, we sell a portion of index holdings to raise the necessary capital. Conversely, if active opportunities are not available, we allocate unused capital to index investing.

We allocate capital based on the opportunities that arise and use our index funds as a bank because carrying unnecessary cash is a drag on investment returns. Our cash account provides operating liquidity to pay current pension entitlements and cover investment transaction costs.

### INNOVATIVE INDEX MANAGEMENT

However, even with index investing we are not satisfied with earning just the market return, less transaction costs. "Beating the market" by even a few basis points has enormous benefits for total fund returns. We have developed competencies in the management of Canadian

and foreign stock index funds. Our quantitative portfolios have exceeded the TSE 300 returns for the last seven consecutive years.

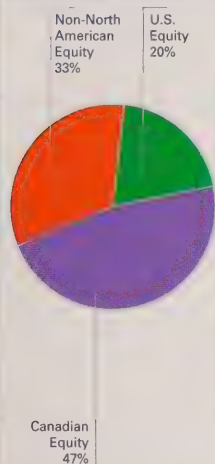
Our Canadian active and index funds represent about two percent of the outstanding float of the TSE. To improve returns above the market benchmark, we have developed quantitative portfolios that invest primarily in TSE 300 stocks based on models that attempt to identify strategies and stocks that should outperform the index.

We account for about 5 percent of trading volume in TSE 300 companies and have minimized transaction costs by trading large blocks of individual stocks or baskets of different stocks in a single transaction. We are also increasing the use of electronic systems to trade with other institutions and further reduce costs.

In 1999, we had \$26.4 billion invested in Canadian and foreign stock index portfolios, representing more than one-third of total investment assets. Foreign stock index funds totalled \$14 billion, with about 94 percent in derivative contracts and the remainder in corporate shares.

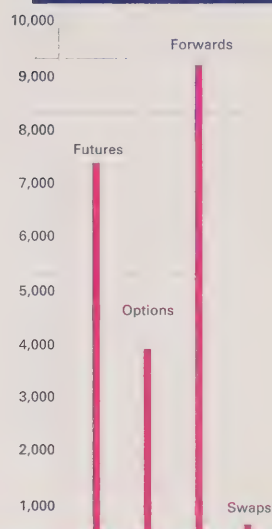


## Equities as at December 31, 1999



We are  
one of  
Canada's  
largest  
derivative  
users

## Number of Derivative Security Transactions



Including the Ontario debentures, we had \$12.9 billion invested in bond index portfolios in 1999. This represented 19 percent of investments.

We also invest in various alternative investment programs which are expected to generate returns that are uncorrelated with passive index investment returns. However, we limit our exposure in any one program to less than one-half of one percent of net investments.

### EFFECTIVE USE OF DERIVATIVES

Derivative contracts play a large part in our investment programs. We use derivatives for active or index equity investing in the U.S., internationally and in Canada because they are a quicker and cheaper way to gain market exposure and rebalance our portfolios than buying the actual stocks. Using derivatives also minimizes market disruption. As a result, we are one of Canada's largest traders of equity-based futures and options.

Derivatives enable us to manage interest rate and foreign currency volatility through swaps, forwards, futures and options. They also help to ensure that all assets contribute

fully to total returns. For example, in 1990 the plan's assets were all invested in non-marketable Ontario debentures. We swapped the fixed-income coupon on the debentures for floating-rate income using interest rate swaps and then exchanged the floating rate for equity-index based derivative contracts. At the end of 1999, we had exchanged fixed-rate interest on \$6.1 billion of the debentures for equity returns.

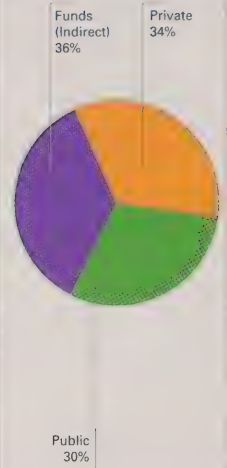
We use derivatives to increase our effective exposure to foreign equity markets within the foreign property limit requirement of the federal *Income Tax Act*. This has had an enormous impact on returns because foreign equity markets have outperformed Canadian equities in recent years, although in 1999 the Canadian market was one of the world's top performers.

### ACTIVELY MANAGED INVESTMENTS

Through actively managed portfolios we attempt to achieve annual investment returns above our benchmarks.

We encourage  
companies  
to practice  
good corporate  
governance

**Merchant Banking  
Investments**  
as at December 31, 1999



**Stock portfolios** We select the shares of undervalued companies based on analyzing each company's financial performance, operations, industry position, management quality, long-term business plan, board structure and board independence. The result at the end of 1999 was a \$4 billion portfolio of Canadian stocks. We also owned \$7.3 billion of foreign stocks selected by external fund managers on the same basis.

Under our total fund management approach, our active equity managers concentrate on exceeding TSE 300 index returns by managing an overweight or underweight of a company's shares relative to the company's weight in the index. If our research shows a TSE 300 company is undervalued, we increase its weighting relative to the index bank by buying shares. If we believe a company is overvalued and its share price will fall, we reduce its weighting by borrowing shares from the index bank, selling them on the market, and buying them back to return to the index bank after the price falls.

We focus on analyzing about 150 companies, with the likelihood of actively managing 40 to 70 stocks in this

manner. Our internal risk evaluation system measures the risk and return on each stock versus the return that would have occurred by investing the same amount in the index.

**Merchant banking** An area where we have developed expertise is merchant banking, which has generated a 25.6 percent annual compounded rate of return since 1992. Our merchant banking activities consist of equity and mezzanine capital investments in businesses of all sizes in a wide range of industries. At the end of 1999, we had more than \$3.1 billion invested in 83 corporations.

Our equity and mezzanine investments in both public and private companies involve a wide range of situations, including management buyouts, business expansions, acquisitions, financial restructurings, ownership changes and "going private" transactions. Our main challenges are to find the right management team in which to invest and to compete with other merchant banks established in the last few years.

## Merchant Banking Portfolio

as at December 31, 1999



Merchant  
Banking  
invested over  
\$1 billion  
in 1999



Michael Lay, Vice-President  
Merchant Banking

About 44 percent of our investments are in Canadian companies involved in manufacturing, telecommunications, entertainment, consumer products, and energy. Investments outside Canada are mostly in the United States and Europe, where we invest directly or in partnership with other merchant bankers.

Two years ago, we launched a venture capital fund to invest equity in early-stage enterprises primarily in the technology and biotechnology sectors. By the end of 1999, we had allocated over \$100 million to 24 North American early-stage companies directly or in partnership with other venture capital firms.

In 1999, our Merchant Bank sold positions in five companies acquired for \$187 million to realize net proceeds of \$479 million.

**Relationship investing** As a large investor with substantial share ownership in individual public companies, we encourage company managers to increase shareholder value by practicing good corporate governance, setting and meeting strategic priorities, and meeting long-term perfor-

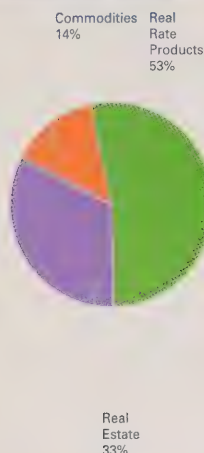
mance criteria. In recent years, we tested our ability to practise what is called relationship investing through strategic alliances with a U.S. partner and a U.K. firm. In 1999, we terminated the relationship with the U.S. partner and made North American relationship investing an internal responsibility. We vote the shares that we buy in target companies to encourage the creation of shareholder value.

At the end of 1999, our relationship investing portfolio held investments valued at approximately \$800 million in 24 Canadian, U.S. and U.K. companies.

In exercising share ownership rights, we support or oppose management proxy proposals according to their likely impact on the company's economic value and our investment returns. A fundamental concern is stock options, which are viewed by some corporate managers as deferred compensation to be cashed in too often at the first opportunity. In our view, when options are granted their costs should be recorded in the financial statements so that shareholders can see the full financial impact of these awards.

## Inflation Hedge Portfolio

as at December 31, 1999



Inflation is  
a major  
concern  
over the  
long term

**Fixed income** Now that our original debenture portfolio is maturing, we are investing more capital in non-Ontario bonds. We have developed quantitative value-added programs to enhance returns which include market neutral strategies and strategies to outperform bond index funds.

Of the \$17.4-billion-portfolio, \$4.5 billion consists of actively managed bonds such as Government of Canada, provincial, global and corporate bonds (including convertible bonds and high-yield notes) as well as interest-rate derivatives, money market securities and external fund-of-fund managers.

### INFLATION-HEDGE INVESTMENTS

Inflation is a major concern because it tends to reduce nominal fixed-income values and increase the cost of pension benefits, making it more difficult to maintain a funding surplus. The fund loses surplus if assets fail to grow at the same pace as CPI inflation plus 4.5 percent. Over the long term, stocks provide a good hedge against inflation, but can be a poor match due to short-term volatility.

To reduce this surplus volatility risk, since the end of 1998 we have identified as a separate asset class investments that collectively give us stable real returns of approximately 5 percent, as well as short-term protection against inflation. Under our revised asset-mix policy, in 2000 we plan to invest up to 15 percent of total funds in assets that have a good correlation with inflation to match the real return risk in our liabilities.

**Real-rate bonds** Real-rate bonds are an excellent match against plan liabilities and along with index-linked mortgages are risk free with respect to inflation. In 1999, we structured \$505 million of financing for Highway 407 in Ontario as a real-rate bond and in doing so decreased the risk of the borrower. This transaction, one of our largest so far with a real rate of return of 5.3 percent, helped increase our portfolio of inflation-hedge securities to \$7.9 billion.

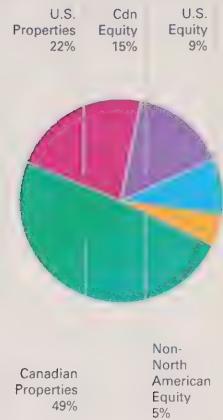




Brian Muzyk, Vice-President  
Real Estate

After  
purchasing  
Cadillac Fairview,  
we'll have  
\$9.3 billion  
in real estate

#### Real Estate Portfolio as at December 31, 1999



**Real estate** Real estate's long-term sensitivity to inflation makes it an attractive asset class to offset the impact of indexed pensions on liability costs. Our \$3.4 billion real estate portfolio consists of \$2.4 billion in directly owned shopping centres and office buildings in Canada and the United States, and \$1 billion of equity in real estate companies, including Cadillac Fairview Corporation, and investment funds.

Our real estate team has assumed a merchant banking role by taking equity positions in select real estate companies and real estate investment trusts. The team invests on a joint basis with them in office and retail properties, including redevelopment projects.

An example of our new approach was the recent offer to purchase the outstanding shares of Cadillac Fairview Corporation, in which the plan previously had a 22 percent equity interest. Purchasing the entire company in mid-March for \$2.3 billion will give us ownership of about 100 properties valued at more than \$6 billion, including Toronto's Eaton Centre, Vancouver's Pacific Centre and the TD Centre office complex in Toronto. These assets will

combine with our existing real estate portfolio to provide strong cash flow and rising values over the long term.

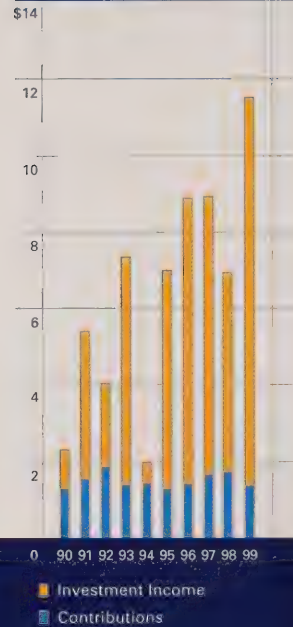
In 1998, we entered the first phase of our global strategy by committing US\$400 million to three international real estate funds. By the end of 1999, US\$108 million had been invested by our partners, enabling us to participate in property opportunities in developed and emerging markets around the world.

**Commodities** Commodities generally have high real returns when there is unanticipated inflation and provide a hedge against short-term inflation risks in the value of the plan's liabilities. We have \$1.1 billion invested through derivatives in the Goldman Sachs commodity index.

Annual  
benefit  
payments  
rose to  
\$2.3 billion

#### Income

(\$ billions)



#### Management's Discussion & Analysis

This section of the annual report elaborates on the information contained in the audited financial statements to assist readers in viewing the plan's financial position and performance through the eyes of management.

#### PENSION PLAN OBJECTIVES

The plan is required to deliver defined benefits to Ontario's teachers during their retirement years. To meet these obligations, and based on the current contribution rates of members and the Ontario government, our long-term goal is to earn an annual rate of return of 4.5 percent above inflation. In practice, the plan's assets are managed to earn a higher rate of return at moderate risk and to achieve a surplus of assets over liabilities. A surplus provides a cushion against a severe decline in asset values or a sharp increase in liabilities as the result of volatile markets or inflation.

#### CONTRIBUTION RATES

In 2000, Ontario teachers will contribute 7.3 percent of the first \$37,600 of salary and 8.9 percent on remaining salary. The Ontario government and designated private schools and organizations match these contributions.

These contribution rates will finance benefits if the real rate of return averages 4.5 percent over the long term. At least every three years, the independent actuary retained by the pension board determines the level of contributions appropriate to fully fund the benefits promised to members. Four reviews have been completed since 1990, the most recent on January 1, 1999, and contribution rates have remained unchanged.

#### YEAR-END FINANCIAL POSITION

The plan's accrued pension liabilities increased from \$48.6 billion to \$52.1 billion during 1999. The actuarial assumptions used to determine these liabilities for financial statement purposes reflect management's best estimate

Investment  
income  
was  
\$10.1 billion

#### Changes in Net Assets

(\$ Millions)	1999	1998
<b>Income</b>		
Investment income	\$10,121	\$5,137
Contributions	1,413	1,757
	11,534	6,894
<b>Expenditures</b>		
Benefits	2,278	2,103
Operating expenses		
Member services	33	32
Investments	91	67
	2,402	2,202
<b>Increase in net assets</b>	<b>\$ 9,132</b>	<b>\$4,692</b>

of investment returns, teachers' salaries, inflation and demographic factors. The main assumptions are set out on page 51.

**Benefit payments** In 1999, the plan paid \$2.3 billion in benefits, an increase of \$175 million over the previous year. The increase principally reflected 5,300 teachers retiring, bringing to 72,000 the number of retired members and their survivors receiving benefits. The 1999 payments included \$108 million in commuted value transfers (versus \$206 million in 1998) and a 0.9 percent cost-of-living adjustment. To calculate the inflation adjustment rate, we average the inflation of each month of the year. This can result in a slight difference from the CPI year-over-year inflation rate. The inflation adjustment paid in January 2000 was 1.5 percent.

**Change in net assets** The plan began 1999 with \$59.1 billion in net assets available for benefits. Income of \$11.5 billion consisted of \$10.1 billion from investments, compared with \$5.1 billion in 1998, and \$1.4 billion from contributions, compared with \$1.8 billion a year earlier.

On the expense side, benefits paid to members and survivors totalled \$2.3 billion, a \$175 million increase during the year. In addition, the cost of operating the pension board was \$123 million, a \$24 million increase from 1998 principally resulting from increases in external investment management fees.

As a result of these changes, net assets available for benefits grew by \$9.2 billion to \$68.3 billion by the end of 1999.

**Surplus** The plan had a financial statements surplus for accounting purposes of \$8.9 billion at December 31, 1999, compared with \$5.7 billion a year earlier. Before calculating the surplus, net asset gains in excess of the actuarial assumptions are amortized over five years to smooth out

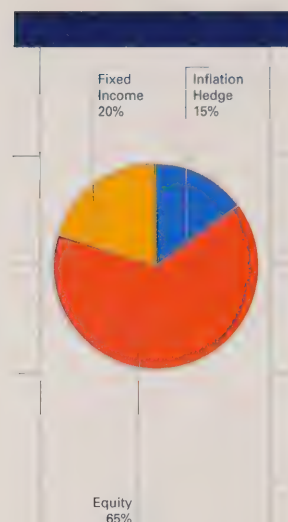
## Accrued Pension Benefits

(\$ Billions) 1999 1998

Accrued pension benefits, beginning of year	\$48.6	\$44.5
Interest on accrued pension benefits	3.5	3.4
Benefits earned	1.3	1.3
Benefits paid	(2.3)	(2.1)
	51.1	47.1
Changes in actuarial assumptions	1.8	0.2
Plan changes	—	2.4
Experience gains	(0.8)	(1.1)
Accrued pension benefits, end of year	\$52.1	\$48.6

There is  
\$7.3 billion  
in the  
smoothing  
reserve

## Asset-Mix Policy 2000



the impact of one-year changes in values. Any loss in net assets below the actuarial assumptions are also amortized. Our asset-mix policy has generated actuarial gains in each of the last five years. Before removing the smoothing reserve of \$7.3 billion, the surplus of net assets over the cost of future pensions was \$16.2 billion.

## MATCHING ASSETS AND LIABILITIES

To create a funding surplus we manage the relationship between investment assets and pension liabilities. Our goal is an asset mix that balances risks and rewards, avoids excessive volatility, and maintains stable contribution rates.

Both assets and liabilities are sensitive to interest rate changes. By attempting to match assets with liabilities and focusing on changes in the surplus, we reduce the risk that liabilities will increase more than assets in response to lower interest rates.

Assets are valued at market every business day so that we know daily how trading and market developments

affect the asset/liability risk equation and whether our short-term investment strategy continues to be appropriate relative to our long-term asset-mix policy.

## ASSET-MIX POLICY

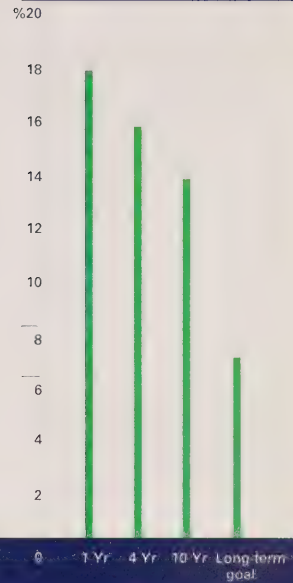
The asset-mix policy is reviewed annually by management and the board of directors and changes are made as necessary to reflect changes in our asset/liability model. The asset mix is crucial to long-term performance. Studies show that 85 to 95 percent of a fund's long-term return is driven by the asset-mix decision with the remaining 5 to 15 percent influenced by active management.

In 1999 the asset-mix policy was 65 percent equities, 25 percent fixed-income securities, and 10 percent inflation-hedge investments such as real estate, real-rate bonds and commodities. For 2000, the asset-mix policy has been adjusted to 65 percent equities, 20 percent fixed-income securities, and 15 percent inflation-hedge



Our  
10-year  
rate of return  
was  
13.4 percent

**Fund Performance**  
(compared to long-term goal  
of 4.5% plus inflation)  
as at December 31, 1999



assets. The change reflects the long-term value of acquiring inflation-hedge assets. This asset-mix policy has a high probability of ensuring assets grow at least as fast as the liabilities over the long term.

We macro-manage the total fund through "overlay" programs to enhance performance. For example, the asset-mix policy allows equity exposure to vary between 60 and 70 percent of net assets. We also set asset-mix ratios for Canada, the United States and non-North American equities. These ratios are increased or decreased within preset ranges to take advantage of opportunities.

An additional overlay program hedges a portion of the fund's exposure to foreign currencies. When we invest abroad, we earn a return on the investment and incur a gain or loss as a result of currency fluctuations. To reduce the volatility of returns from currency fluctuations, we hedge 50 percent of the policy exposure in major foreign currencies.

## INVESTMENT PERFORMANCE

Net investments increased to \$67.1 billion in 1999, compared with \$58.1 billion at the end of 1998.

**1999 fund performance** During another year of volatile stock markets, we achieved a 17.4 percent total fund rate of return in 1999, compared with 9.9 percent the prior year. After inflation, the return was 14.8 percent, compared with 8.8 percent in 1998. The 1999 return generated \$10.1 billion in investment income, compared with \$5.1 billion a year earlier.

The performance primarily reflected our asset-mix policy with its emphasis on equity investments. Canadian stocks performed extremely well after several years of lagging foreign markets. In addition, our inflation-hedge investments, notably real estate, had much stronger results compared with 1998.

## Rate of Return Compared to Benchmark

	Investment returns	Benchmark return	Composite Benchmark
Fixed income and short-term securities	-4.6 %	-3.9 %	Scotia Capital Treasury Bills (91 days) Scotia Capital Canada Universe Ontario Debentures
Canadian equity	30.4 %	32.0 %	TSE 300 TSE 300 plus 2 %
U.S. equity	12.7 %	14.1 %	S&P 500
Non-North American equity	27.7 %	21.6 %	Morgan Stanley EAFE National Index EAFE
Inflation-hedge	12.0 %	9.8 %	Scotia Capital Real Return Bond Goldman Sachs Commodities Total Return Index CPI plus 5 %
Total Plan	<b>17.4 %</b>	<b>17.6 %</b>	Benchmark weighted by the policy asset mix

**Four-year return** A longer-term measure has greater relevance, greater reliability, and lower volatility than one-year performance. A common standard within the pension fund industry is to calculate average performance on a four-year cycle. Our strong results in 1999 drove up the four-year average return to 15.4 percent. The real rate of return (after inflation) was 13.8 percent – well in excess of the investment objective of 4.5 percent on average over the long term.

**Ten-year return** The average annual compounded rate of return for the past 10 years was 13.4 percent, or 11.3 percent real return after inflation, well above the long-term goal of 4.5 percent plus inflation. This exceptional performance is a direct result of investing heavily in Canadian and foreign stocks, using derivative contracts extensively to increase exposure to foreign equity markets, and management's focus on creating value through active investment initiatives above the level of returns produced by markets through passive investing.

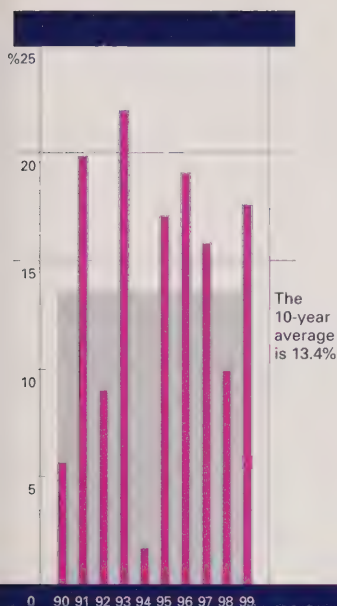
**Performance vs. benchmarks** The performance of our main investment portfolios versus their benchmarks is shown above.

The **total fund benchmark** aggregates the benchmark returns for each asset class, using our asset-mix policy weights. This benchmark, less 34 basis points for implementation and overhead costs, is the target we expect investment managers to achieve to receive performance incentives. As a result, the 17.4 percent total fund return in 1999 compared with 17.6 for the benchmark, or 17.3 percent for the cost-adjusted performance benchmark.

Towards the end of 1999 we reduced the risk to the fund by deviating from our asset-mix policy by reducing exposure to the Canadian and U.S. equity markets. This partially accounted for our results being slightly lower than the benchmark.

For four years, the total fund return of 15.4 percent compared to 15.8 percent for the benchmark, or 15.5 percent for the cost-adjusted performance benchmark.

## Rate of Return



Three  
stocks  
accounted for  
87% of the  
TSE's gain

## Long-Term Average Rate of Return

	Return	Benchmark
4 years	15.4%	15.8%
10 years	13.4%	11.2%

**Fixed income** (including non-marketable Ontario debentures) returned a negative 4.6 percent versus a negative 3.9 percent for the fixed-income benchmark. We continue to reduce the weighting of fixed-income in our asset-mix policy, while increasing our exposure to real-return bonds.

**Canadian equity** (actively managed, indexed funds and merchant banking) posted a 30.4 percent return versus 32 percent for our composite Canadian equity benchmark. The Canadian market was driven to exceptional levels by three stocks (BCE, Nortel and JDS Uniphase) which accounted for 87 percent of the gain on the TSE 300. Our actively managed portfolio was underweight in these securities as a result of our value approach to investing. Our enhanced index funds, however, beat the benchmark for the seventh consecutive year. The extremely narrow base of the Canadian market dramatically increases risk exposure. For example, if the three stocks were removed from the index, the benchmark return would have been 4.2 percent in 1999 as 138 stocks had negative returns.

Merchant banking achieved a 28.3 percent return versus its benchmark of 33.7 percent (the TSE 300 Index plus two percentage points). With the TSE 300 index one of the best performers among world markets, it was a difficult year for merchant banking to match the benchmark, recognizing that 46 percent of its assets are outside Canada. However, merchant banking has contributed considerable value to total returns over the past eight years, generating a 25.6 percent average rate of return.

**U.S. equity** returned 12.7 percent versus 14.1 percent for the benchmark. The Standard & Poor's 500 performance was also narrowly based with 16 stocks accounting for over 80 percent of the 1999 return. Our internal staff matched the performance of the benchmark on 98 percent of the U.S. assets. Our underperformance of the U.S. benchmark prompted a change in our relationship investing from external to internal management.

## Non-North American Equities

as at December 31, 1999

Europe 41%  
U.K. 19%  
Japan 23%



Emerging  
Markets  
6%

Other  
11%

Commodities  
earned a  
31.6 percent  
return

**Non-North American equity** did very well at 27.7 percent versus 21.6 percent for its benchmark. Overseas index investing handled by our staff exceeded the benchmark, while our external fund managers produced exceptional returns as patience in emerging markets paid off in 1999.

**Inflation-hedge assets**, the combination of real-return bonds and commodities and real estate earned 12 percent versus 9.8 percent for the composite benchmark. The real-rate bond portfolio earned 8.3 percent, better than the 8.0 percent benchmark as a result of the higher return negotiated in the Highway 407 financing. The commodity index, although only 13.7 percent of this asset class, added nearly two percentage points to the liability-hedge return by earning 31.6 percent, a significant turnaround after the last two years.

Real estate itself earned 14.3 percent, versus 7.6 percent for its benchmark, largely due to the increased value of our 22 percent ownership of Cadillac Fairview Corporation. The real estate benchmark was changed in 1999 from the Frank Russell Canada Property Index to a more

relevant inflation-hedge measure composed of the Consumer Price Index plus 5 percentage points.

## RISKS AND RISK MANAGEMENT

Risk of surplus loss is by far our biggest fund concern. We need a surplus to increase the probability of meeting all our pension obligations. We want to grow that surplus to avoid the need for an increase in contribution rates. However, there is a risk that pursuing higher long-term surplus growth through active management could lead to short-term surplus losses and a rise in contribution rates.

We manage **surplus risk** using a Value at Risk (VaR) methodology. VaR has forced us to think of surplus risk as the aggregate of liability risk, asset-mix policy risk, and active management risk, taking into account correlation and diversification between the components.

The main source of **liability risk** is a drop in real interest rates, which increases the present value of obligations





Brian Gibson, Vice-President,  
Equities

## We've seen an extraordinary 10-year bull market

accumulated up to that point. It makes new pension obligations more difficult to finance, and puts upward pressure on contribution rates. Higher real interest rates have the opposite effect.

**Asset-mix policy risk** would be the mirror image of liability risk, and surplus risk would be zero, if investments perfectly matched the plan's assumption that assets grow every year at a real rate of about 4.5 percent plus Consumer Price Index inflation. Real-return bonds come close, but fall a bit short on yield.

The absence of a perfect asset forces us to consider assets that individually do not always behave like our pension promise, but collectively give us the best trade-off between longer term expected return and acceptable short-term surplus risk. Consequently, our asset mix is heavily weighted to equities because they meet our long-term goals, while our inflation-hedges give more modest real returns but dampen surplus risk. The fund has benefited from a high exposure to equity markets (see note 2c

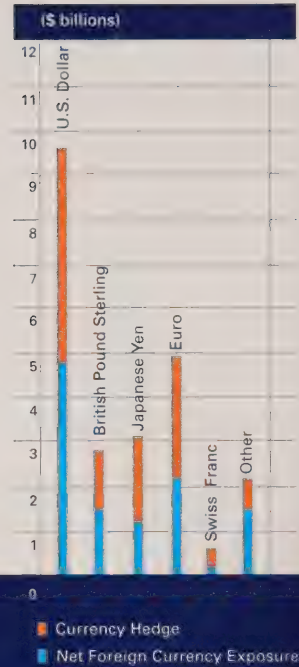
on page 49) during an extraordinary 10-year bull market. The risk seems high that returns in the period immediately ahead will be far more modest. However, it is difficult for a large fund to move in and out of the market efficiently to avoid a correction.

The asset mix is still fairly sensitive to nominal interest rates. As inflation rates have stabilized and the fear of late-cycle inflation pressures has increased, nominal bond returns no longer outperform liability growth.

**Active management risk** is the potential risk of underperforming the benchmark by trying to improve on the return we get from passive implementation of asset-mix policy. The incremental surplus risk from active management is small. We control active risk through policy guidelines and procedures. Again using VaR, we assign each manager "risk capital" to go along with that manager's value-added target with an expectation of a specific return

We  
diversify  
globally  
to reduce  
risk

**Currency Exposure**  
as at December 31, 1999



on that risk capital. Risk from active positions is measured daily against the risk limits. One added benefit from these risk measures has been an improvement in operational risk management.

Changes in the value of the Canadian dollar relative to foreign currencies can increase or decrease returns on our foreign investments, creating **foreign exchange risk**. We hedge 50 percent of our exposure to the main currencies of Europe, the United States and Japan, and had \$11.6 billion of foreign currency hedges in place at the end of 1999 to reduce volatility in our exposure to foreign currency.

We aim to reduce **excessive sensitivity to Canadian asset returns** by diversifying globally through foreign stock purchases and equity derivative contracts. Overall, Canada remains our primary equity market, where we had \$18.7 billion invested in equities in 1999, followed by \$12.9 billion in the United States, \$3.1 billion in Japan and \$2.6 billion in Britain.

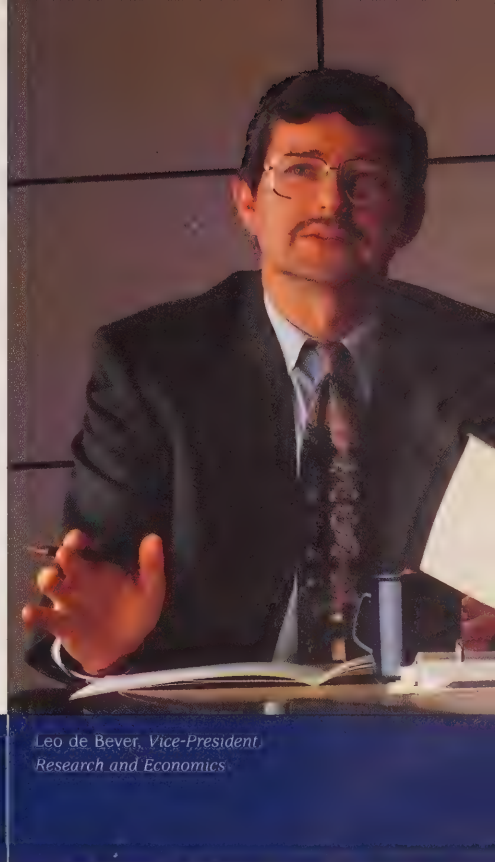
Along with our concern about the limited availability of stocks on the TSE 300 because many leading

Canadian corporations are closely owned, we are also concerned about the loss of diversification. Many Canadian companies are listing on the NASDAQ in the U.S. rather than on the TSE, diminishing the investment pool in Canada and resulting in the overweighting of stocks such as BCE and Nortel. This is a significant concern for us for the future.

With respect to **liquidity risk**, after payment of pension benefits and operating costs, the increase in net assets available for benefits totalled \$9.2 billion in 1999. Cash flow came from \$10.1 billion in investment income (dividends, interest income, rental income, and realized and unrealized capital gains) and \$1.4 billion in contributions.

The cash needs for pension payments and operating expenses are predictable. On the investment side, our major liquidity risk is associated with our equity derivative contracts. A drop in foreign equity markets sustained for more than three months would require us to pay

# We measure and manage investment risks



Leo de Beyer, Vice-President  
*Research and Economics*

more cash to counterparties than we would otherwise anticipate.

We regularly assess the fund's ability to withstand the liquidity effects of a catastrophic 25 percent drop in all markets. Because the equity contracts have been profitable, we currently hold \$2.1 billion in collateral from counterparties. This cash collateral, along with marketable short-term securities, annual cash flow, and other liquid assets, is more than sufficient to cover the fund's liquidity risk.

Every investment exposes us to the risk that a security issuer defaults on payments or becomes insolvent. **Credit risk** exists with security issuers, such as governments and corporations, as well as with financial institutions and investment dealers with whom we have investment contracts. The largest credit exposure (note 2e on page 50) is to the Province of Ontario, which owes the plan \$13.0 billion of non-marketable debentures valued at \$16.3 billion, and \$1.3 billion in contributions receivable.

In the case of security issuers and derivative counterparties, we continuously monitor credit risk and, depending

on the credit rating, restrict debt and equity investment in a single corporation or financial institution to between one and five percent of total fund assets.

In the case of swap counterparties, we deal primarily with 19 financial institutions rated Single A or better, and one unrated pension fund. Unrealized gains and losses on equity swaps are exchanged every three to six months. We exchange cash flows on interest rate swaps every six months, reducing the potential impact of a counterparty defaulting on its contractual obligations.

## RETIREMENT COMPENSATION ARRANGEMENT

Historically, members contributed on all their earnings and received a pension on all their earnings. In 1992, the federal government limited the pension that could be paid from registered pension plans in an attempt to put them on a similar basis to other retirement vehicles, such as RRSPs.





Trading Room

## There is a supplementary pension plan

The partners responded in 1992 by creating a supplementary plan, called a retirement compensation arrangement (RCA), to top up amounts that cannot be provided by a registered plan. This ensures that all members, including a small number of higher salaried members, contribute on all their earnings and receive pensions based on all their earnings. Members with qualifying credit not allowed by the federal *Income Tax Act* (ITA) also benefit from the RCA. For instance, plan members receive a qualifying year toward their retirement factor if they teach more than 10 days per year. This is not allowed under the ITA; therefore, benefits resulting from any additional qualifying years will be paid out of the RCA.

The RCA is managed in conjunction with the registered plan. However, 50 cents of every dollar contributed must be deposited interest-free with the federal government. Consequently, expected investment growth in the RCA

would be at half the rate of the registered plan because returns are earned on only half the assets in the RCA. As a result, the partners have decided to fund the RCA on a pay-as-you-go basis and permit unfunded liabilities to accumulate. This produced a deficit between net assets of \$1.1 million and accrued pension benefits of \$239 million at December 31, 1999. These liabilities represent less than one percent of total accrued pension benefits. We expect these liabilities to fluctuate widely reflecting even minor changes in assumptions about economic and demographic trends, and benefit payments could be suspended temporarily, if assets were insufficient until contributions could be raised.

The RCA is discussed further in note 12 on page 57.

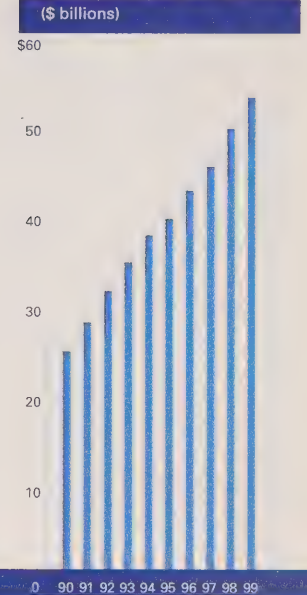


## Best Estimate Valuation Assumptions

(at December 31)	1999	1998
(percent)		
Rate of return	6.75	7.25
Salary escalation	3.25	3.50
Inflation rate	2.25	2.50

Generating  
a surplus  
is  
challenging

## Cost of Future Pensions as at December 31



## Actuarial Valuations

Two main valuations measure the plan's financial health. The financial statement valuation for accounting purposes is a view of the year-end position. The statutory funding valuation, calculated at least every three years, is a more conservative view of the contributions needed to fund the plan over the long term.

The initial value of invested assets is the same for both because it is determined by the market. Liabilities, however, are treated differently. The financial statement approach values the pension benefits earned, or accrued, at year end. The funding valuation estimates the value of future, or unaccrued, benefits over the lifetime of all current members. It also includes the present value of future contributions as an asset that is added to invested assets. The funding valuation is used by the partners to determine the surplus available for sharing gains and losses.

Underlying both valuations are certain economic and demographic assumptions. The three most important are future investment returns, salary changes, and inflation.

Salary changes affect the future value of liabilities because pension calculations are based on each member's best five years of earnings. Teachers' pensions are fully indexed against inflation, which increases future liabilities.

More important than the accuracy of each assumption is the relationship between investment returns and inflation, and salary changes and inflation. It is assumed that over the long-term teachers' salaries will exceed inflation by one percentage point and investment returns will exceed inflation by 4.0 percentage points.

## PARTNERSHIP

From 1917 until 1992, the Ontario government was the sole sponsor of the plan, responsible for all funding losses and entitled to all funding gains.

In 1992, the Ontario Teachers' Federation negotiated equal partnership with the government. Teachers are now

## Funding Valuation Assumptions

(as at January 1) 1999 1998 1996 1995 1990

(percent)

Rate of return	7.5	7.5	8.0	8.0	8.5
Salary escalation	4.5 <sup>2</sup>	4.5 <sup>1</sup>	5.0	5.0 <sup>1</sup>	5.75
Inflation rates	3.5 <sup>3</sup>	3.5 <sup>1</sup>	4.0	4.0 <sup>1</sup>	4.5

<sup>1</sup> except 2% for 2 years

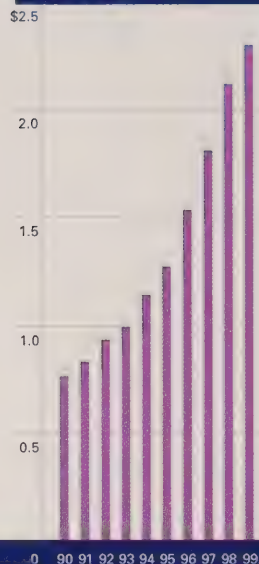
<sup>2</sup> except 2% for 2 years, 3.25% for 1 year

<sup>3</sup> except 2% for 2 years, 2.75% for 1 year

Since 1990,  
the plan  
has generated  
\$12.5 billion in  
actuarial gains

## Benefits Paid

(\$ billions)



responsible for half of any plan losses to cover the costs of future pensions. Conversely, the partners negotiate the use of half of plan gains and also have an equal say in the plan's design, including changes in benefits and contribution rates.

### USE OF PAST FUNDING GAINS

The pension board's long-term strategic decisions have produced substantial gains in asset values. At the same time, unusually low inflation and generally modest changes in teachers' salaries reduced the growth of future liabilities.

As a result, the plan has gone from a large unfunded liability of \$7.8 billion on January 1, 1990 to a series of gains that have made it possible for the plan partners to eliminate special payments by the Ontario government to pay off the initial unfunded liability, and to improve benefits.

### IMPROVED BENEFITS

Actuarial gains have been used to improve member benefits on two occasions – by \$712 million in 1996 and \$2.2 billion in 1998.

The major 1998 plan improvements consist of higher pension payments after CPP integration at age 65 and early retirement incentives. The early retirement incentive program, effective June 1, 1998 to December 31, 2002, enables teachers to retire on unreduced pension if their age and years of qualifying service add up to 85 rather than 90. By the end of 1999, 10,500 teachers had taken advantage of the program.

### USE OF FUTURE FUNDING GAINS

The partners agreed in April 1998 to share the 1998 gain of \$6.8 billion and future gains by:

1. Spending \$2.2 billion on improving benefits;
2. Eliminating the government's special payments on the

## Funding Valuation Results Before Application of Gain

(as at January 1)	1999	1998	1996	1993	1990
(\$ Billions)					
Value of assets	\$54.0	\$48.5	\$38.3	\$29.4	\$21.0
Future contributions	12.0	12.6	14.5	14.3	12.2
Special payments	3.7	8.5	8.4	8.4	—
Total assets	69.7	69.6	61.2	52.1	33.2
Future benefits	66.2	62.8	60.5	50.6	41.0
Gain (unfunded liability)	3.5	6.8	0.7	1.5	(7.8)

pre-1990 unfunded liability, at an estimated cost of \$8.4 billion; and

- Once funding was in place for these initiatives, the next \$6.2 billion (that is, \$8.4 billion less \$2.2 billion) would be available for the OTF to enhance benefits, reduce member contributions, or hold in a contingency reserve against any future funding losses.

If the OTF takes the gain prior to April 2001, it would need the approval of the government on its use. After that date, the decision is solely the OTF's. The 1999 gain of \$3.5 billion was used to eliminate the remaining special payments.

### FUNDING ISSUES

Since 1995, we have used an asset/liability model to determine the most appropriate asset-mix policy to meet the plan's future pension obligations and maintain a funding surplus. The model's 10-year horizon enables us to analyze the impact of a variety of policy scenarios for consideration

by the plan partners. For example, how the aging of the plan's membership will affect the asset-mix policy; how different benefit policies such as an extended or permanent 85 factor affect the funding surplus and contribution rates; how changes in asset allocations, such as replacing nominal bonds with real-return bonds or equities, affect risk and investment returns; and whether the plan would have sufficient cash flow to cover future benefit payments under certain highly negative situations.

Examining these types of scenarios might seem pessimistic considering the funding surpluses generated over the past 10 years. However, a large decline in asset values or sharp increase in liabilities is always possible and would have serious implications for a fund owing \$66.2 billion (as at January 1, 1999) in future benefits to more than 300,000 individuals.

For instance, a recent amendment to the *Pension Benefits Act* allows pensioners, as well as active and deferred plan members, to withdraw funds in cases of

# One option is a contribution rate stabilization fund

shortened life expectancy. Depending upon its interpretation, this amendment could have a significant impact on the actuarial liabilities of the plan.

In developing policy alternatives, it is assumed that the plan partners prefer not to increase contribution rates. As it is, the ability to use contribution rates to keep the plan fully funded has changed dramatically over the past 10 years. In 1990, future contributions represented 58 percent of total assets. If the plan had had a funding shortfall, contributions could have been increased to make it up. Today, future contributions represent only 20 percent of total assets. Consequently, increasing contribution rates would have a limited ability to make up a funding deficiency.

## USE OF SURPLUS

The asset/liability model offers four possible benefit and funding policies for consideration:

1. *Reduce contributions.* In the absence of a continuing surplus cushion, contributions may have to be increased later in the 10-year period.
2. *Improve benefits.* Our initial findings suggest that this would result in a high probability of an increase in the contribution rate.
3. *Create a 5 percent surplus cushion.* If assets remain between 95 and 105 percent of liabilities, no surplus could be distributed and the contribution rate would remain unchanged.
4. *Create a rate stabilization fund.* A segregated fund would hold the next \$6.2 billion of surplus designated for use by the OTE. This would reduce the probability of a rate hike over the next 10 years.

The decision of the partners with respect to benefit and funding policies will directly change the risk profile of the fund and affect the pension board's investment policies.



## Management's Responsibility for Financial Reporting

The financial statements of the Ontario Teachers' Pension Plan have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must, of necessity, be based on estimates and judgements. The accounting policies followed in the preparation of these financial statements conform with accounting principles generally accepted in Canada. Financial information presented throughout the annual report is consistent with the financial statements.

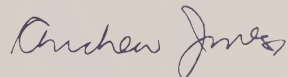
Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded and proper records maintained. These controls include quality standards in hiring and training of employees, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization. Internal controls are reviewed and evaluated by internal audit programs which are subject to scrutiny by the external auditors.

Ultimate responsibility for the financial statements rests with the Board of Directors. The board is assisted in its responsibilities by the Audit and Actuarial Committee, consisting of five directors who are not officers or employees of the plan administrator. In addition, the committee reviews the recommendations of the internal and external auditors for improvements in internal control and the action of management to implement such recommendations. In carrying out its duties and responsibilities, the committee meets regularly with management and with both the external and internal auditors to review the scope and timing of their respective audits, to review their findings and to satisfy itself that their responsibilities have been properly discharged. This committee reviews the financial statements and recommends them for approval by the board.

The plan's external auditors, Deloitte & Touche LLP, have conducted an independent examination of the financial statements in accordance with auditing standards generally accepted in Canada, performing such tests and other procedures as they consider necessary to express the opinion in their Report to the Administrator. The external auditors have full and unrestricted access to the Audit and Actuarial Committee to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal control systems.



CLAUDE LAMOUREUX  
PRESIDENT AND CHIEF EXECUTIVE OFFICER



ANDREW JONES  
VICE-PRESIDENT, FINANCE

February 18, 2000

William M. Mercer Limited was retained by the Ontario Teachers' Pension Plan Board (the "Board") to perform an actuarial valuation of the assets and the going concern liabilities of the Ontario Teachers' Pension Plan (the "Plan") as at December 31, 1999, for inclusion in the Plan's financial statements. As part of the valuation, we examined the Plan's recent experience with respect to the non-economic assumptions and presented our findings to the Board. In addition, we provided the Board with statistical, survey and other information used to develop its long-term economic assumptions.

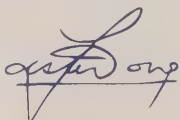
The valuation of the Plan's actuarial liabilities was based on:

- membership data provided by the Ontario Teachers' Pension Plan Board as at December 31, 1998;
- methods prescribed by the Canadian Institute of Chartered Accountants for pension plan financial statements;
- assumptions about future events (for example, future rates of inflation and future rates of return on the pension fund) which have been communicated to us as the Board's best estimate of these events;
- information obtained from the Education Relations Commission and The Ontario Ministry of Labour on negotiated wage settlements in the 1998/99 and 1999/2000 school years; and
- an estimate of the salary grid increase for the 1999/2000 school year based on the information above, along with input from the Partners.

The objective of the financial statements is to fairly present the financial position of the Plan on December 31, 1999 as a going concern. This is different from the statutory valuation (the actuarial valuation required by the *Teachers' Pension Act* and the *Pension Benefits Act (Ontario)*), which uses actuarial methods prescribed by the *Teachers' Pension Act* and cautious assumptions about future events to establish a prudent level for future contributions.

While the actuarial assumptions used to estimate liabilities for the Plan's financial statements represent the Board's best estimate of future events, and while in our opinion these assumptions are reasonable, the Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations, and will affect the financial position of the Plan, and the contributions required to fund it, at that time.

We have tested the data for reasonableness and consistency, and we believe it to be sufficient and reliable for the purposes of the valuation. We also believe that the methods employed in the valuation and the assumptions are, in aggregate, appropriate for the purposes of the valuation. Our opinions have been given, and our valuation has been performed, in accordance with accepted actuarial practice.



LESTER J. WONG, F.C.I.A.

February 18, 2000



MALCOLM P. HAMILTON, F.C.I.A.

Auditors'  
Report to the Administrator



We have audited the statement of net assets available for benefits and accrued pension benefits and surplus of the Ontario Teachers' Pension Plan as at December 31, 1999 and the statements of changes in net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended. These financial statements are the responsibility of the Plan's administrator. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in Canada. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the net assets available for benefits and accrued pension benefits and surplus of the Plan as at December 31, 1999 and the changes in its net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended in accordance with accounting principles generally accepted in Canada.

*Deloitte & Touche LLP*

CHARTERED ACCOUNTANTS

TORONTO, CANADA

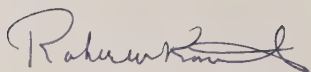
February 18, 2000

Statement  
of Net Assets Available for Benefits and Accrued Pension  
Benefits and Surplus

AS AT DECEMBER 31, 1999

(\$ Millions)	1999	1998
<b>NET ASSETS AVAILABLE FOR BENEFITS</b>		
<b>Assets</b>		
Investments (note 2)	\$73,850	\$63,456
Receivable from the Province of Ontario (note 3)	1,252	1,233
Receivable from brokers	210	5
Cash	46	28
Fixed assets	8	8
	<u>75,366</u>	<u>64,730</u>
<b>Liabilities</b>		
Accounts payable and accrued liabilities (note 4)	7,063	5,559
<b>Net assets available for benefits</b>	68,303	59,171
Actuarial asset value adjustment (note 1e)	(7,264)	(4,788)
<b>Actuarial value of net assets available for benefits</b>	<u>\$61,039</u>	<u>\$54,383</u>
<b>ACCRUED PENSION BENEFITS AND SURPLUS</b>		
Accrued pension benefits (note 5)	\$52,105	\$48,636
Surplus	8,934	5,747
<b>Accrued pension benefits and surplus</b>	<u>\$61,039</u>	<u>\$54,383</u>

ON BEHALF OF THE BOARD



CHAIR



BOARD MEMBER



# Statement of Changes in Net Assets Available for Benefits

FOR THE YEAR ENDED DECEMBER 31, 1999

<i>(\$ Millions)</i>	1999	1998
<b>Net assets available for benefits, beginning of year</b>	<b>\$59,171</b>	<b>\$54,479</b>
<b>Investment operations</b>		
Investment income (note 6)	10,121	5,137
Investment expenses (note 11a)	(91)	(67)
Net investment operations	10,030	5,070
<b>Member service operations</b>		
Contributions (note 9)	1,413	1,757
Benefits (note 10)	(2,278)	(2,103)
Member service expenses (note 11b)	(33)	(32)
Net member service operations	(898)	(378)
<b>Net increase in net assets</b>	<b>9,132</b>	<b>4,692</b>
<b>Net assets available for benefits, end of year</b>	<b>\$68,303</b>	<b>\$59,171</b>

# Statement of Changes in Accrued Pension Benefits

FOR THE YEAR ENDED DECEMBER 31, 1999

(\$ Millions)	1999	1998
<b>Accrued pension benefits, beginning of year</b>	<b>\$48,636</b>	<b>\$44,457</b>
<b>Increase in accrued pension benefits</b>		
Interest on accrued pension benefits	3,493	3,416
Benefits accrued	1,301	1,305
Changes in actuarial assumptions (note 5a)	1,756	216
Changes in plan provisions (note 5b)	—	2,393
	<b>6,550</b>	<b>7,330</b>
<b>Decrease in accrued pension benefits</b>		
Benefits paid (note 10)	2,278	2,103
Experience gains (note 5c)	803	1,048
	<b>3,081</b>	<b>3,151</b>
<b>Net increase in accrued pension benefits</b>	<b>3,469</b>	<b>4,179</b>
<b>Accrued pension benefits, end of year</b>	<b>\$52,105</b>	<b>\$48,636</b>

# Statement of Changes in Surplus

FOR THE YEAR ENDED DECEMBER 31, 1999

(\$ Millions)	1999	1998
<b>Surplus, beginning of year</b>	<b>\$5,747</b>	<b>\$4,444</b>
Increase in net assets available for benefits	9,132	4,692
Change in actuarial asset value adjustment (note 1e)	(2,476)	790
Increase in actuarial value of net assets available for benefits	6,656	5,482
Net increase in accrued pension benefits	(3,469)	(4,179)
<b>Surplus, end of year</b>	<b>\$8,934</b>	<b>\$5,747</b>

## Notes to Financial Statements

FOR THE YEAR ENDED DECEMBER 31, 1999

### DESCRIPTION OF PLAN

The following description of the Ontario Teachers' Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Pension Act* as amended.

**(a) General** The Plan is a contributory defined benefit pension plan co-sponsored by the Partners who are the Province of Ontario (the Province) and Plan members, represented by the Ontario Teachers' Federation. Contributions are made by active members of the Plan and matched by the Province and designated private schools and organizations. The Plan is registered with the Financial Services Commission of Ontario and under the *Income Tax Act (Canada)* (registration number 0345785).

**(b) Funding** Plan benefits are funded by contributions and investment earnings. The determination of the value of the benefits and required contributions is made on the basis of periodic actuarial valuations (see note 8).

**(c) Retirement pensions** A retirement pension is available based on the number of years of credited service, the average of the best five annual salaries and the age of the member at retirement. A member is eligible for a reduced retirement pension from age 55. An unreduced retirement pension is available at age 65 or at any age if the member has 35 years credit or the sum of a member's age and qualifying service equals 90 (see note 5b).

**(d) Disability pensions** A disability pension is available at any age to a disabled member with a minimum of 10 years of credited service. The type of disability pension is determined by the extent of the disability.

**(e) Death benefits** Death benefits are available on the death of an active member and may be available on the death of a retired member. The benefit may take the form of a survivor pension, lump sum payment or both.

**(f) Additional credited service** Members can obtain additional credited service in the Plan for certain absences and for transfers from other plans.

**(g) Withdrawals from the Plan** Withdrawal refunds, transfers and commuted value transfers are available subject to the lock-in provisions when a member ceases to be employed in education prior to qualifying for an immediate pension.

**(h) Escalation of benefits** Pension benefits are adjusted annually for inflation at 100 per cent of the Consumer Price Index, subject to a limit of 8 per cent in any one year with any excess carried forward.

**(i) Income taxes** The Plan is a Registered Pension Plan as defined in the *Income Tax Act (Canada)* and, consequently, is not subject to income taxes.

**(j) Retirement Compensation Arrangement** The Retirement Compensation Arrangement (RCA) has been created by agreement between the Partners as a supplementary plan to provide the members of the Plan with benefits that, due to limitations imposed by the *Income Tax Act (Canada)* and its regulations, cannot be provided under the Registered Pension Plan. Because the RCA is a separate trust, the net assets available for benefits and accrued benefits of the RCA are not included in these financial statements (see note 12).

## Notes to Financial Statements

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### (a) Basis of presentation

These financial statements present the financial position and the results of operations of the Plan and are prepared in accordance with generally accepted accounting principles.

#### (b) Investments and derivative contracts

**Valuation of investments** Investments are recorded as of the trade date and are stated at fair value. Fair value is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Province of Ontario Debentures (the Debentures), which are not marketable, are stated at estimated fair values calculated by discounting the Debentures cash flows using year-end implied market yields of comparable securities. Money market, publicly traded bonds and equity securities are valued at year-end market prices. Other investments for which market quotations are not available, such as real estate properties, mortgages and private placements, are valued on a current market yield or appraised basis.

**Valuation of derivative contracts** Interest rate, currency, commodity and equity swaps, futures and options, currency and interest rate forwards and forward rate agreements are recorded at the estimated amounts of consideration that the Plan would receive or pay at the reporting date in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act, with the resulting gain or loss being recognized in unrealized investment income.

**Securities purchased under agreements to resell** Securities purchased under agreements to resell, being the receivables resulting from securities which the Plan has purchased and simultaneously committed to resell at a specified price on a specified date in the future, are recorded as of trade date and are stated at fair value. Interest income earned is included in income for the related investments.

**Securities sold under agreements to repurchase** Securities sold under agreements to repurchase, being the liabilities resulting from securities which the Plan has sold and simultaneously committed to repurchase at a specified price on a specified date in the future, are recorded as of trade date and are stated at fair value. Interest expense incurred is netted against interest income for the related investments.

**Securities sold but not yet purchased** Securities sold but not yet purchased, which represent the Plan's obligation to deliver securities which were not owned at the time of sale, are recorded as of the trade date and are stated at fair value. Gains or losses are included in income for the related investments.

**Unrealized gains and losses** The change in the difference between fair value and the cost, being the purchase price, of investments at the beginning and end of each year represents the unrealized gain (loss) and is included in investment income.

**Accrual of income** Interest income, interest expense and dividend income have been accrued to the year-end date.



## Notes to Financial Statements

### **(c) Foreign currency translation**

Assets and liabilities related to foreign currency transactions are translated into Canadian dollars at the exchange rate in effect at the balance sheet date. The income and expense amounts related to these transactions are translated into Canadian dollars at the rates of exchange prevailing at the dates of the transactions. The realized and unrealized gains and losses arising from these translations are included in investment income.

### **(d) Accrued pension benefits**

Accrued pension benefits and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries. The valuation is made as at the start of the year and then extrapolated to year-end. It uses the projected benefit method prorated on service and management's best estimate of future economic events derived from market-based yields, as at the valuation date, of debt obligations with characteristics similar to the Plan's liabilities (see note 5).

### **(e) Actuarial asset value adjustment**

The actuarial value of net assets available for benefits is determined by reference to market trends consistent with assumptions underlying the valuation of accrued pension benefits. The adjustment represents the difference between the actual and management's best estimate of return on the Plan amortized over five years. Using this adjustment, fair value remains the underlying basis for asset valuation, but fluctuations are averaged over a five-year period.

The year-over-year change in the actuarial asset value adjustment is reflected in the Statement of Changes in Surplus.

### **(f) Contributions and benefits**

Contributions are recorded on the accrual basis except for special payments from the Province which are recorded in the year in which they are received (see note 8).

Benefits are recorded on the accrual basis.

### **(g) Use of estimates**

In preparing these financial statements, management must make certain estimates and assumptions which primarily affect the reported values of assets and liabilities, related income and expenses and related disclosures.

## **2. INVESTMENTS**

The investment objectives of the Plan are to minimize the likelihood of an increase in contribution rates and to protect the pension benefits of the Plan members. The strategy employed to achieve these objectives is to invest cash flow from contributions, maturing Debentures and investment returns into a diversified pool of Canadian and foreign assets.

The Plan has \$16.3 billion (1998 – \$18.9 billion) in non-marketable Debentures which must be held to maturity. The Debentures have interest rates and a maturity profile that exposes the Plan to significant fluctuations in fair value. To manage these fluctuations, foreign currency volatility and other exposures in a manner consistent with its investment objectives, the Plan uses: interest rate, foreign currency, commodity and equity futures, forwards, options, swaps, and forward rate agreements (collectively referred to as derivative contracts); and securities purchased under agreements to resell, securities sold under agreements to repurchase and securities sold but not yet purchased. These derivative contracts and other investments allow the Plan to retain the Debentures while achieving its objectives of asset diversification.

## Notes to Financial Statements

The Plan also utilizes derivative contracts for trading purposes in anticipation of movements in the markets. The intention of this activity is to enhance investment returns.

**(a) Investments<sup>(1)</sup> before allocating the effect of derivative contracts and investment-related receivables and liabilities**

The schedule below summarizes the fair value and the cost of the Plan's investments including net accrued interest and dividends of \$454 million (1998 – \$437 million), before allocating the effect of derivative contracts and investment-related receivables and liabilities, as at December 31:

(\$ Millions)	1999		1998	
	Fair Value	Cost	Fair Value	Cost
<b>Fixed income</b>				
Debentures	\$16,328	\$12,991	\$18,933	\$13,910
Money market securities	1,723	1,715	1,468	1,456
Bonds				
Canadian	17,361	16,931	9,535	9,307
Foreign	1,152	1,200	1,597	1,589
Mortgages	267	258	219	213
	<b>36,831</b>	<b>33,095</b>	<b>31,752</b>	<b>26,475</b>
<b>Equities</b>				
Canadian	18,651	12,400	17,557	13,570
United States	2,296	2,060	2,224	2,173
Non-North American	9,352	6,662	6,261	4,916
	<b>30,299</b>	<b>21,122</b>	<b>26,042</b>	<b>20,659</b>
<b>Real estate properties</b>	<b>2,450</b>	<b>2,411</b>	<b>1,582</b>	<b>1,567</b>
	<b>69,580</b>	<b>56,628</b>	<b>59,376</b>	<b>48,701</b>
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	992	990	426	400
Receivables from derivative contracts, net	3,278	409	3,654	326
<b>INVESTMENTS</b>	<b>73,850</b>	<b>58,027</b>	<b>63,456</b>	<b>49,427</b>
<b>Investment-related liabilities (note 4)</b>				
Securities sold under agreements to repurchase	(2,883)	(2,879)	(1,275)	(1,241)
Securities sold but not yet purchased	(973)	(992)	(146)	(146)
Real estate indebtedness	(693)	(710)	(374)	(331)
Accrued liabilities for derivative contracts, net	(2,215)	(2,294)	(3,555)	(205)
<b>Net investments (note 2c)</b>	<b>\$67,086</b>	<b>\$51,152</b>	<b>\$58,106</b>	<b>\$47,504</b>

<sup>(1)</sup> For additional details, refer to the Schedule of Investments over \$20 million on page 63.

## Notes to Financial Statements

### (b) Derivative contracts

Derivative contracts are financial contracts, the value of which is derived from the value of underlying assets, indices, interest rates or currency rates. The Plan utilizes such contracts for asset mix management purposes; for managing the fund's exposure to interest rate and foreign currency volatility; and for trading purposes.

Notional amounts of derivative contracts represent the volume of outstanding positions and do not represent the potential gain or loss associated with the market risk or credit risk of these positions. Rather, they serve as the basis upon which the returns from, and the fair value of, the contracts are determined.

Derivative contracts, transacted either in the over-the-counter market directly between two counterparties or on regulated exchanges, include:

**(i) Swap contracts** Interest rate swaps are contractual obligations in which two counterparties exchange interest rate flows over a period of time based on a notional principal amount. One party typically agrees to pay a fixed interest rate in return for receiving a floating interest rate.

Equity and commodity swaps are contractual obligations between two counterparties to exchange cash flows based upon an equity or commodity index return. Typically, one party agrees to pay a floating interest rate in return for receiving a return on a specified equity or commodity index.

Currency swaps are contractual obligations in which the counterparties exchange principal amounts in different currencies, both initially and at maturity. Over the term of the swap, the counterparties also exchange interest flows in the swapped currencies.

**(ii) Futures and forwards contracts** Futures and forwards are contractual obligations either to buy or to sell a specified amount of an underlying interest, which include or are determined by interest rates, money market securities, bonds, equity indices, commodities or foreign currencies at predetermined future dates and prices.

Futures are acquired in standardized amounts on regulated exchanges and are subject to daily cash margining. Forwards are customized contracts acquired in the over-the-counter market. As a result of entering into these contracts, returns are generated that are equivalent to the gain or loss that would arise if the securities or foreign currencies had been bought or sold directly at the future price.

**(iii) Option contracts** An option contract gives the purchaser of the contract the right, but not the obligation, to buy or sell an underlying interest, which includes or is determined by financial instruments, interest rates, equity indices, commodities and foreign currencies.

The seller (or writer) of an option is obligated to fulfill the term of the contract. A call writer must sell the underlying interest and the put writer must buy the underlying interest if called upon to do so by the exercising option holder.

Options may be acquired in standardized amounts on regulated exchanges or may be customized and acquired in the over-the-counter market.

# Notes to Financial Statements

The following schedule summarizes notional amounts and fair value of the Plan's derivative contracts as at December 31:

(\$ Millions)	1999		1998	
	Notional	Fair Value	Notional	Fair Value
<b>Asset conversion</b>				
Interest rate swaps	\$ 6,091	\$ (763)	\$ 7,072	\$(1,195)
Equity and commodity swaps	13,719	3,258	10,925	5,515
		<u>2,495</u>		<u>4,320</u>
<b>Interest rate management</b>				
Interest rate swaps	1,104	1	2,889	(13)
Futures	4,238	(1)	10,112	(13)
Exchange traded options				
Purchased	3,041	4	3,474	1
Written	3,771	(4)	4,994	(4)
Over-the-counter options				
Purchased	97	3	350	2
Written	169	(4)	141	(1)
		<u>(1)</u>		<u>(28)</u>
<b>Foreign currency management</b>				
Currency swaps	553	10	723	(64)
Forwards	27,833	359	34,312	(83)
		<u>369</u>		<u>(147)</u>
<b>Trading</b>				
Interest rate swaps	2,836	28	1,155	(24)
Futures	13,715	(161)	1,975	(36)
Forwards	7,582	53	1,720	(27)
Exchange traded options				
Purchased	313	22	4	1
Written	441	(32)	197	(7)
Over-the-counter options				
Purchased	2,062	43	699	5
Written	1,042	(19)	559	(19)
		<u>(66)</u>		<u>(107)</u>
		<u>2,797</u>		<u>4,038</u>
Less: Net cash collateral received under derivative contracts		<u>(1,734)</u>		<u>(3,939)</u>
<b>Net fair value of derivative contracts</b>		<u>\$1,063</u>		<u>\$ 99</u>
<b>The net fair value of derivative contracts is represented by:</b>				
Receivables from derivative contracts		\$4,688		\$ 7,001
Cash collateral paid under derivative contracts		324		591
Accrued liabilities for derivative contracts		(1,891)		(2,963)
Cash collateral received under derivative contracts		<u>(2,058)</u>		<u>(4,530)</u>
		<u>\$1,063</u>		<u>\$ 99</u>



## Notes to Financial Statements

The derivative contracts on page 48 mature within one year except for the following which have a weighted average maturity (in years) of:

	1999		1998	
	Notional (\$ millions)	Maturity (years)	Notional (\$ millions)	Maturity (years)
<b>Asset conversion</b>				
Interest rate swaps	\$5,487	6.6	\$5,890	6.6
Equity and commodity swaps	5,155	1.6	4,012	1.8
<b>Interest rate management</b>				
Interest rate swaps	993	4.4	2,339	4.3
<b>Foreign currency management</b>				
Currency swaps	553	7.1	710	7.9
Forwards	57	2.2	33	1.6
<b>Trading</b>				
Interest rate swaps	2,536	5.1	940	3.8
Over-the-counter options	102	3.1	333	3.2

**(c) Investments after allocating the effect of derivative contracts and investment-related receivables and liabilities**

The Plan's investments at fair value, before and after allocating the effect of derivative contracts and investment-related receivables and liabilities on the Plan's investments as at December 31 are summarized below:

(\$ Millions)	1999		1998	
	At Fair Value (per note 2a)	Effective Net Investments at Fair Value	At Fair Value (per note 2a)	Effective Net Investments at Fair Value
<b>Fixed income</b>	\$36,831	\$17,474	\$31,752	\$14,495
<b>Equities<sup>(1)</sup></b>				
Canadian	18,651	18,667	17,557	17,613
United States	2,296	12,867	2,224	11,482
Non-North American	9,352	15,624	6,261	12,934
	30,299	47,158	26,042	42,029
<b>Real estate properties</b>	2,450	2,454	1,582	1,582
	69,580	67,086	59,376	58,106
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	992	—	426	—
Receivables from derivative contracts, net	3,278	—	3,654	—
<b>INVESTMENTS</b>	73,850	67,086	63,456	58,106
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase	(2,883)	—	(1,275)	—
Securities sold but not yet purchased	(973)	—	(146)	—
Real estate indebtedness	(693)	—	(374)	—
Accrued liabilities for derivative contracts, net	(2,215)	—	(3,555)	—
<b>Net investments</b>	\$67,086	\$67,086	\$58,106	\$58,106

<sup>(1)</sup> Includes effective net investments in commodity-related exposure of \$1,093 million (1998- \$401 million).

## Notes to Financial Statements

### **(d) Interest rate risk**

Interest rate risk refers to the adverse consequences of interest rate changes on the Plan's cash flows, financial position and income. This risk arises from differences in the timing and amount of cash flows related to the Plan's assets and liabilities.

The value of the Plan's assets is affected by short-term changes in nominal interest rates and equity markets. Pension liabilities are exposed to the long-term expectation of rate of return on the investments as well as expectations of inflation and salary escalation.

The Plan's primary exposure is to a decline in the long-term real rate of return which may result in higher contribution rates required to meet pension obligations. As at December 31, 1999, holding the inflation and salary escalation assumptions constant, a 1% decrease in the assumed real long-term rates of return would result in an increase in the pension liabilities of approximately 16% (1998 - 16%).

To match these liabilities, the Plan has established a policy asset mix of approximately 65% equities, 25% fixed income securities and a 10% liability-hedge consisting of commodities, real estate and real rate products. The returns on fixed income securities are sensitive to changes in nominal interest rates while equity returns have historically shown high correlation with changes in inflation and salary escalation over the long term. The liability hedge assets have similar return characteristics to that of the pension obligation.

After giving effect to the derivative contracts and investment-related receivables and liabilities discussed in note 2b, a 1% increase in nominal interest rates would result in a decline in the value of the fixed income securities of 7.7% (1998 - 9.5%).

### **(e) Credit risk**

Credit risk is the risk of loss in the event the counterparty to a transaction defaults, or otherwise fails to perform under the terms of a contract.

At December 31, 1999, the Plan's most significant concentration of credit risk was with the Province. This concentration relates primarily to the holding of \$16.3 billion of Debentures, a receivable of \$1.3 billion and future funding requirements of the Plan.

The Plan limits derivative contract credit risk by dealing with counterparties that have a credit rating of A or higher, and by utilizing an internal credit limit monitoring process, as well as through the use of credit mitigation techniques such as master netting arrangements and obtaining collateral where appropriate.

### **(f) Foreign currency risk**

Foreign currency exposure arises from the Plan's holdings of foreign currency-denominated investments and related derivative contracts.

The Plan has established a currency overlay program to hedge its asset-mix policy allocation to U.S. and Non-North American equities. The Plan also takes trading positions in foreign currencies with the objective of increasing returns. The Plan's net foreign currency exposure in Canadian dollars after giving effect to the related hedge, as at December 31, is as follows:

# Notes to Financial Statements

(\$ Millions)	1999			1998
Currency	Foreign Currency Exposure	Net Foreign Currency Hedge	Net Foreign Currency Exposure	Net Foreign Currency Exposure
United States Dollar	\$ 9,589	\$ 4,735	\$ 4,854	\$ 4,441
British Pound Sterling	2,850	1,313	1,537	1,219
Japanese Yen	3,110	1,830	1,280	914
Euro	4,899	2,654	2,245	1,935
Swiss Franc	661	409	252	402
Other	2,161	629	1,532	2,031
	<b>\$23,270</b>	<b>\$11,570</b>	<b>\$11,700</b>	<b>\$10,942</b>

## 3. RECEIVABLE FROM THE PROVINCE OF ONTARIO

The receivable from the Province consists of required matching contributions and interest thereon.

(\$ Millions)	1999	1998
Contributions receivable	\$1,194	\$1,165
Accrued interest receivable	58	68
	<b>\$1,252</b>	<b>\$1,233</b>

The receivable from the Province is comprised of amounts to be received as follows: \$650 million in 2000 and \$602 million in 2001.

## 4. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

(\$ Millions)	1999	1998
<b>Investment-related liabilities</b>		
Securities sold under agreements to repurchase	\$2,883	\$1,275
Accrued liabilities for derivative contracts, net	2,215	3,555
Securities sold but not yet purchased	973	146
Payable to brokers	228	152
Real estate indebtedness	693	374
	<b>6,992</b>	<b>5,502</b>
<b>Other accounts payable and accrued liabilities</b>	<b>71</b>	<b>57</b>
	<b>\$7,063</b>	<b>\$5,559</b>

## 5. ACCRUED PENSION BENEFITS

### (a) Actuarial assumptions

The actuarial assumptions used in determining the value of accrued pension benefits, \$52.1 billion (1998 - \$48.6 billion) reflect management's best estimate of future economic events and have been derived from market-based yields, as at the valuation date, of debt obligations with characteristics similar to the plan's liabilities. The inflation rate is the difference between the yield on federal real-return bonds and federal long-term nominal bonds. A summary of the assumptions is as follows:

	1999	1998
Asset rate of return	6.75%	7.25%
Salary escalation rate	3.25%	3.50%
Inflation rate	2.25%	2.50%

## Notes to Financial Statements

In 1999 there was a change in the assumed inflation rate from 2.5% to 2.25%. The salary escalation rate has also been reduced by 0.25% and the assumed rate of return on assets has been reduced by 0.5% from last year's level.

The changes in the actuarial assumptions in 1999 resulted in a net increase in the value of accrued pension benefits of \$1,756 million. In 1998, similar changes to the actuarial assumptions resulted in a net increase in the value of accrued pension benefits of \$216 million.

### (b) Plan provisions

The Plan was amended effective June 1, 1998 to incorporate changes arising out of an agreement reached by the Partners on April 18, 1998. The main change having a direct impact on the actuarial valuation of the Plan is the provision of an early retirement window covering the period between June 1, 1998 and December 31, 2002, during which time a member can retire with an unreduced pension if the sum of the member's age and qualifying service equals 85 rather than 90. No material amendments were made to the plan in 1999.

### (c) Experience gains

Experience gains of \$803 million (1998 – \$1,048 million) arose from differences between the actuarial assumptions and actual results and relate primarily to current experience for members' salary and inflation rates.

## 6. INVESTMENT INCOME

### (a) Investment income before allocating the effect of derivative contracts

Investment income, before allocating the effect of derivative contracts and before allocating the realized and unrealized net gains/losses, for the year ended December 31, is as follows:

(\$ Millions)	1999	1998
<b>Interest income</b>		
Debentures (net of interest incurred on swap contracts of \$753 million; 1998 – \$820 million)	\$ 762	\$ 764
Money market securities	104	183
Bonds		
Canadian	708	395
Foreign	75	78
Mortgages	16	14
	<b>1,665</b>	<b>1,434</b>
<b>Dividend income</b>		
Canadian equities	271	303
United States equities	35	22
Non-North American equities	244	212
	<b>550</b>	<b>537</b>
<b>Real estate properties</b> (net of interest expense of \$41 million; 1998 – \$27 million)	<b>114</b>	<b>83</b>
	<b>2,329</b>	<b>2,054</b>
<b>Net gain on investments<sup>(1)</sup></b>	<b>7,792</b>	<b>3,083</b>
	<b>\$10,121</b>	<b>\$5,137</b>

<sup>(1)</sup> Includes net unrealized gains of \$1,075 million (1998 – \$1,435 million).



## Notes to Financial Statements

### (b) Investment income after allocating the effect of derivative contracts

Investment income by asset class, after allocating the effect of the derivative contracts and allocating the realized and unrealized net gains which includes foreign currency gains of \$1,106 million (1998 – \$1,289 million loss) related primarily to the foreign currency management and trading programs, for the year ended December 31, is as follows:

(\$ Millions)	1999	1998
Fixed income	\$ (57)	\$1,264
Canadian equities	4,552	33
United States equities	1,702	1,350
Non-North American equities	3,705	2,323
Real estate	219	167
	<b>\$10,121</b>	<b>\$5,137</b>

### 7. INVESTMENT RETURNS AND RELATED BENCHMARK RETURNS

Investment returns and related benchmark returns by investment asset class for the year ended December 31 are as follows:

	1999		1998	
	Investment Returns	Benchmark Returns	Investment Returns	Benchmark Returns
Fixed income and short-term	(4.6)%	(3.9)%	9.5 %	10.3 %
Canadian equity	30.4	32.0	0.4	(1.4)
United States equity	12.7	14.1	33.5	37.7
Non-North American equity	27.7	21.6	25.0	29.6
Liability-hedge investments	12.0	9.8	1.9	7.0
Total Plan	17.4%	17.6%	9.9%	11.9%

Investment returns have been calculated in accordance with the acceptable methods set forth by the Association for Investment Management and Research and the Pension Investment Association of Canada.

The Plan identifies benchmarks to evaluate the performance of the investment management process. During 1999, the Plan made a decision to measure certain asset classes relative to an inflation-related benchmark which more closely resembles the volatility in the accrued pension benefits. The 1998 performance information has been restated to be consistent with this approach. The performance of each asset class is measured against a benchmark that simulates the results of the markets in which the managers invest, except that the liability-hedge investments are measured against an inflation-related benchmark.

The Total Plan return is measured against a Canadian dollar denominated composite benchmark produced by aggregating Canadian dollar equivalent returns from each of the policy asset class benchmarks, using the Plan's asset-mix policy weight. The Total Plan return incorporates the Plan's currency hedging policy and tactical asset allocation decisions.

## Notes to Financial Statements

### 8. FUNDING POLICY

Statutory actuarial valuations are prepared periodically in accordance with the *Teachers' Pension Act* to determine the funding requirements of the Plan. Active members are currently required to contribute 7.3 percent of the portion of their salaries covered by the Canada Pension Plan and 8.9 percent of salaries above this level. Aggregate member contributions are matched by the Province and other employers.

The actuarial assumptions and methods used to determine statutory pension liabilities are different than those used to calculate the amounts disclosed in these financial statements. The statutory valuations use a more conservative approach than the valuations used in these financial statements (note 5) and also take into account benefits to be earned and contributions to be made after the valuation date.

The initial statutory valuation of the Plan, prepared by William M. Mercer Limited as at January 1, 1990 disclosed an unfunded liability of \$7.8 billion which was the amount by which the Plan's liabilities exceeded its assets. This liability was the responsibility of the Province and was to be paid off with interest by a series of special payments over a 40 year period, which began January 1, 1990. Subsequent statutory valuations have treated the present value of the remaining special payments as an asset.

The statutory valuation as at January 1, 1998 disclosed the present value of special payments to be \$8.45 billion, with an actuarial gain of \$6.78 billion. Pursuant to the Partnership Agreement between the Ontario Teachers' Federation (OTF) and the Province, the Partners entered into negotiations to decide how to utilize the gain. Pursuant to the agreement reached on April 18, 1998, the Partners agreed to share the 1998 actuarial gain of \$6.78 billion and future gains in the following sequence:

- (i) \$2.24 billion would be spent in improving benefits;
- (ii) special payments on the pre-1990 unfunded liability would be eliminated at an estimated cost of \$8.45 billion; and
- (iii) a further \$8.45 billion less the \$2.24 billion would be spent on improved benefits or member contribution rate reductions, subject to the Province's consent prior to April 1, 2001; or held in a contingency reserve as determined by the OTF.

As a result, \$2.24 billion of the gain was used to improve benefits under the Plan, and the remaining \$4.54 billion of the gain was used to eliminate the obligation of the Province to make special payments after November 30, 2008. These changes consumed the actuarial gain. The present value of the remaining special payments after application of gains was \$3.91 billion as at January 1, 1998.

The statutory valuation as at January 1, 1999 disclosed the present value of the remaining special payments to be \$3.65 billion with an actuarial gain of \$3.52 billion. Pursuant to the 1998 agreement noted above all of this gain was used to eliminate the obligation of the Province to make special payments after April 1999.

Notes  
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**9. CONTRIBUTIONS**

(\$ Millions)	1999	1998
<b>Members</b>		
Current service	\$ 612	\$ 600
Optional credit	8	7
	<b>620</b>	<b>607</b>
<b>Province of Ontario</b>		
Current service	592	587
Special payments (note 8)	128	492
Optional credit	11	3
Interest	43	49
	<b>774</b>	<b>1,131</b>
Other employers	9	14
Transfer from other pension plans	10	5
	<b>19</b>	<b>19</b>
	<b>\$1,413</b>	<b>\$1,757</b>

**10. BENEFITS**

(\$ Millions)	1999	1998
Retirement pensions	\$2,016	\$1,734
Disability pensions	30	30
Death benefits	93	90
Refunds	16	31
Commuted value transfers	108	206
Transfers to other plans	15	12
	<b>\$2,278</b>	<b>\$2,103</b>

**11. ADMINISTRATIVE EXPENSES**

**(a) Investment expenses**

(\$ Millions)	1999	1998
External investment management fees	\$34.8	\$16.2
Salaries and benefits	31.8	26.4
Custodial fees	6.5	5.6
Premises and equipment	6.4	7.1
Professional consulting services	4.3	4.8
Information services	3.6	3.6
Communication and travel	1.8	2.1
Statutory audit fees	0.3	0.3
Other	1.1	1.3
	<b>\$90.6</b>	<b>\$67.4</b>

# Notes to Financial Statements

## (b) Member service expenses

(\$ Millions)	1999	1998
Salaries and benefits	\$21.2	\$20.3
Premises and equipment	6.1	5.7
Professional consulting services	2.2	2.9
Communication and travel	1.9	1.9
Board and committee remuneration	0.2	0.2
Statutory audit fees	0.2	0.2
Other	0.8	0.7
	<u>\$32.6</u>	<u>\$31.9</u>

## (c) Executive compensation

The compensation table represents full disclosure of base salary, annual bonus, long-term incentives and other compensation earned in 1997, 1998 and 1999 by the Chief Executive Officer and the four other most highly compensated executives.

Name and Principal Position	Year	Base Salary <sup>(1)</sup>	Annual Bonus <sup>(2)</sup>	Long-term Incentive Plan <sup>(3)</sup>	Group Term Life Insurance	Other Compensation
Claude Lamoureux <i>President &amp; CEO</i>	1999	\$357,637	\$196,100	\$131,900	\$1,033	\$ 9,600 <sup>(4)</sup>
	1998	349,077	177,600	0	964	9,600
	1997	322,220	148,400	302,885	897	9,600
Robert Bertram <i>Senior V.P. Investments</i>	1999	\$276,309	\$102,600	\$101,800	\$ 798	\$13,343 <sup>(5)</sup>
	1998	269,053	63,200	0	777	13,209
	1997	271,717	159,400	264,460	756	13,058
Neil Petroff <i>V.P. International Equity Indexes, Fixed Income &amp; Foreign Exchange</i>	1999	\$175,444	\$202,800	\$ 51,400	\$ 507	\$ 0
	1998	170,606	124,700	0	490	0
	1997	160,322	288,100	41,287	446	0
Brian Muzyk <i>V.P. Real Estate</i>	1999	\$163,881	\$188,400	\$ 55,500	\$ 473	\$ 3,174 <sup>(6)</sup>
	1998	158,770	125,900	0	459	3,074
	1997	159,928	267,000	96,134	445	0
Morgan McCague <i>V.P. Quantitative Investments</i>	1999	\$164,863	\$188,000	\$ 53,200	\$ 476	\$ 3,218 <sup>(6)</sup>
	1998	155,037	162,900	0	448	3,009
	1997	154,883	258,600	86,016	431	2,890

<sup>(1)</sup> The 1997 base salary includes 27 bi-weekly pay dates.

<sup>(2)</sup> Bonuses for investment professionals are based on a combination of total fund, asset class, and individual performance, measured in dollars of value added. Performance versus benchmark is measured over four annual performance periods.

Bonuses for other executive staff are based on achievement of annual corporate and divisional objectives.

<sup>(3)</sup> The investment long-term incentive program was restructured in 1999 following a review of competitive market practices. The new program continues to be based on four-year performance periods. Initial grants are adjusted by the four-year total fund rate of return and by a performance modifier, based on total fund dollar value-added over a composite benchmark.

<sup>(4)</sup> Automobile allowance.

<sup>(5)</sup> Includes an automobile allowance of \$8,000 per annum plus unused vacation cashout.

<sup>(6)</sup> Unused vacation cashout.



## Notes to Financial Statements

### 12. RETIREMENT COMPENSATION ARRANGEMENT

The Retirement Compensation Arrangement (RCA) is established pursuant to an agreement between the Province of Ontario and the Ontario Teachers' Federation (the Partners), to provide to the members of the Plan certain benefits that would have been provided under the Registered Pension Plan, but for amendments made to the *Income Tax Act (Canada)* and its Regulations that restrict benefits that may be provided under a registered plan for periods of service after 1991 and for certain periods before 1992 that are credited after 1991.

The RCA is administered under a trust separate from the assets of the Registered Pension Plan. The Ontario Teachers' Pension Plan Board (the Board) has been appointed by the Partners to act as the trustee of the RCA.

Because the RCA is a separate trust, the net assets available for benefits and the value of accrued benefits and deficiency, referred to below, have not been included in the accompanying financial statements of the Registered Pension Plan on pages 40 to 42.

The RCA is funded on a pay-as-you-go basis from a portion of the contributions made to the Board by teachers, the Province of Ontario and designated private schools and organizations. The portion is based on a rate determined periodically by the Board's independent actuary in a manner that is expected to be sufficient to pay the benefits over the next twelve months. Due to the funding policy adopted by the Partners, the assets will continue to be substantially less than the liabilities.

In addition, since it is difficult to predict the benefits expected to be paid over the next twelve months, it is possible that the assets may be insufficient to pay the benefits. In such a case, the payment of benefits will be temporarily suspended and the contributions raised in order to fund the payments that are due under the RCA.

A summary of the balance sheet for the RCA as at December 31 is as follows:

(\$ Thousands)	1999	1998
<b>Net assets available for benefits</b>		
Assets	\$ 1,799	\$ 1,240
Liabilities	(655)	(202)
	<b>\$ 1,144</b>	<b>\$ 1,038</b>
<b>Accrued benefits and deficiency</b>		
Accrued benefits	\$ 238,768	\$ 286,098
Deficiency	(237,624)	(285,060)
	<b>\$ 1,144</b>	<b>\$ 1,038</b>

The actuarial assumptions used in determining the value of accrued benefits reflect management's best estimate of future economic events and have been derived from the market-based yields, as at the valuation date, of debt obligations with characteristics similar to the plan's liabilities. The inflation rate is the difference between the yield on federal real-return bonds and federal long-term nominal bonds. A summary of the assumptions is as follows:

	1999	1998
Asset rate of return	3.375%	3.625%
Salary escalation rate	3.250%	3.500%
Inflation rate	2.250%	2.500%

## Notes to Financial Statements

The assumed rate of return has been adjusted to reflect the fact that the RCA investment returns are taxed at a rate of 50 per cent.

The estimate of the value of accrued benefits is highly sensitive to salary increases, both actual and assumed. Any changes to the salary assumptions will have a significant impact on the liabilities for future benefits. In addition, significant uncertainty exists in projecting the liabilities of the RCA due to changes in the number of future participants as well as changes to the income tax regulations relating to pensions.

### **13. COMMITMENTS**

The Plan has committed to purchase shares and limited partnership units, which will be funded over the next several years in accordance with the terms and conditions agreed to. As at December 31, 1999, these commitments totaled \$1.6 billion (1998 – \$2.6 billion).

In addition to the above, the Plan has committed to purchase a further 78.2% of the outstanding equity of Cadillac Fairview Corporation, a real estate investment and management company, for \$2.3 billion. After the acquisition of Cadillac Fairview, the Plan will own 100% of the company.

### **14. UNCERTAINTY DUE TO THE YEAR 2000 ISSUE**

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. Although the change in date has occurred, it is not possible to conclude that all aspects of the Year 2000 Issue that may affect the entity, including those related to employers, counterparties, suppliers, or other third parties, have been fully resolved.

### **15. COMPARATIVE FIGURES**

Certain comparative figures have been reclassified to conform with the current year's presentation.

## Statement of Corporate Governance Practices

The Toronto and Montreal stock exchanges require listed companies to disclose their system of corporate governance as a condition of continued listing on the exchanges. In our view, effective corporate governance helps to ensure that a company's resources are devoted primarily to enhancing long-term value. We have chosen to comply with the disclosure requirements because:

- we believe we should measure our own behavior by the standards we expect of others; and
- we provide pension services to over 300,000 individual customers who have the right to know how their pension plan is governed and managed.

Of the 14 TSE guidelines, all but one apply to the pension plan. The exception recommends that a board committee nominate new directors. In our case, this is done under the partners' agreement by the plan's co-sponsors. We comply generally or specifically with the remaining 13 guidelines.

Management has considered the governance principles and completed the related self-assessment questionnaire issued in January, 2000 by an industry task force composed of representatives from the Association of Canadian Pension Management, the Pension Investment Association of Canada, and the Office of the Superintendent of Financial Institutions (Canada).

### MANDATE OF THE PENSION PLAN CORPORATION

The Ontario Teachers' Pension Plan Board is an independent corporation (without share capital) established on January 1, 1990 by the *Teachers' Pension Act*. This Ontario statute requires the corporation to administer the pension plan, manage its investment assets, and pay members and their survivors the benefits promised. The *Teachers' Pension Act* states: "The Board shall administer the pension plan and manage the pension fund in accordance with this Act, the *Pension Benefits Act* (Ontario), and the *Income Tax Act* (Canada)."

The plan is a defined benefit pension plan registered under the *Pension Benefits Act* and the *Income Tax Act* (Canada). It is comprised of a base plan and the Retirement Compensation Arrangement (RCA) (see page 31 and note 12 to the financial statements). The *Pension Benefits Act* (Ontario) defines the fiduciary duties of all pension plan administrators in Ontario and obliges them to administer the plan and invest assets with the same prudence expected of a person dealing with another's property. The standards of conduct expected of a fiduciary are also set out in common law.

The *Teachers' Pension Act* provides for the joint sponsorship of the pension plan by the Ontario government, through the Minister of Education, and the executive of the Ontario Teachers' Federation (OTF), as the representative of plan members.

## Statement of Corporate Governance Practices

An agreement signed by the partners effective January 1, 1992 sets out the terms of joint sponsorship. The partners are jointly responsible for plan losses and gains. A six-member partners' committee is responsible for changes in plan design and benefit levels. The agreement deals with the appointment of the board of directors and delineates the board's powers and duties other than those set out in legislation. The members of the partners' committee are not members of the board of directors. The partners have also appointed the board as trustee of the RCA.

### COMPOSITION OF BOARD OF DIRECTORS

By law, the board of directors is required to act independently of the sponsoring partners and to make decisions in the best interests of all beneficiaries – that is, the active teachers, former teachers and retired teachers who are plan members as well as the survivors of deceased members. In this respect, the role of the directors is similar to that of any corporation; they are required to act in the best interests of the corporation and its shareholders generally, and not in the interests of any specific group of shareholders.

Each partner appoints four directors and together the partners name the chair as the ninth director. Ted Medland, former chief executive of Wood Gundy Inc., served as chair until the end of 1999. Robert Korthals, a former president of the Toronto-Dominion Bank, was selected by the partners to be the chair at the beginning of 2000.

The partners select directors based on the relevance of their expertise and experience to the mandate of the corporation. No member of management is a director.

### BOARD COMMITTEES

There are four board committees:

- The *investment committee* reviews the investment policy and asset mix, approves annual performance objectives for the investment portfolios, and approves all transactions that exceed the discretionary limits set for management. This committee includes all directors.
- The *audit and actuarial committee* reviews the annual financial statements, recommends the appointment of the external auditors and the independent actuary, and receives their reports. It also receives the reports of the internal auditor. The committee consists of five directors: David J. Lennox (Chair), Geoffrey W. Clarkson, Ann Finlayson, John Lane and Gary Porter.
- The *benefits adjudication committee* rules on disputes between plan members and board staff about pension benefits. This committee includes two board members, Geoffrey W. Clarkson (Chair) and Lucy G. Greene (Vice-Chair), as well as nine non-board members nominated by the partners and appointed by the board: Gérard Bélisle, Wendy Gauthier,



## Statement of Corporate Governance Practices

Shannon Hogan, Jeff Holmes, Marina Howlett, Jim Livermore, Pearse Shannon, Peter Shena and Cliff Whitfield. Disputes are heard by panels comprised of the two board members and four other committee members.

- The *human resources and compensation committee* approves the salary budgets, and annual and long-term performance bonuses for employees. It also reviews succession planning and key employee development. This committee includes all directors.

The board does not have a corporate governance committee. Governance issues are dealt with by the full board in the normal course of business.

### EFFECTIVENESS OF BOARD

An orientation program is in place for new directors to assist them in executing their fiduciary and governance duties. All directors attend special seminars on specific technical issues, such as the actuarial valuation of liabilities and the use of derivative contracts. Education is provided by outside experts as well as by staff specialists.

The fact that each director is appointed for a term of two years, and can only serve four consecutive terms, ensures that the partners consider the qualifications and effectiveness of individual directors on a continuing basis.

In 1999, the board and the investment committee met 10 times, the audit and actuarial committee six times, and the human resources and compensation committee four times. The benefits adjudication committee held one appeal hearing and met twice during the year.

### INDEPENDENCE OF BOARD

The structure of the board, and the process for appointing directors, ensures that the board of directors is able to operate independently of management.

To ensure access to external sources of important information, the directors meet from time to time with outside advisers on general topics, as well as with external investment managers and experts in compensation management. Furthermore, the audit and actuarial committee consults directly with the internal and external auditors and the independent actuary and reviews the auditors' findings on the effectiveness of internal controls.

Individual directors can engage an outside adviser, with the approval of the chair, at the organization's expense in appropriate circumstances.

### ROLE OF MANAGEMENT

Ongoing plan administration and investment management is delegated by the board of directors to the chief executive officer and his staff. The staff manages two core businesses – member services and investment services – each supported by general corporate services.

## Statement of Corporate Governance Practices

This plan is one of few Canadian pension organizations that provide pension services directly to its members rather than through their employers.

### **MANAGEMENT PERFORMANCE**

To ensure the interests of management and plan beneficiaries are closely aligned, senior staff receive annual and long-term bonuses based on the achievement of preset performance targets approved by the directors. The board requires management to set annual corporate objectives as well as longer-term business strategies. The objectives are accompanied by an annual financial plan for both fund investment and plan administration.

The strategy for investments is expressed in the Statement of Investment Policy and Goals, which the board reviews annually. This document sets out, for example, the long-term asset-mix policy as well as the objective of the fund to achieve investment returns that exceed the rate of inflation by 4.5 percent.

The board also regularly reviews the strategies for active management of assets. Managers are rewarded for achieving annual and four-year performance targets. In the case of member services, managers are required to meet annual and three-year performance targets for improvements in the quality of services delivered to members as measured by regular surveys of member opinions, and the effectiveness of managing operating costs.

Every year, the board receives an actuarial valuation of the plan's financial viability and an audited financial statement. The directors also annually review the investment and non-investment risks faced by the organization, and the adequacy of procedures to deal with those risks. In addition, the performance of each investment portfolio is reviewed every month.

### **ACCOUNTABILITY AND COMMUNICATIONS**

The board has made accountability to the partners and disclosure of activities to plan members the cornerstone of its communication policy. This policy acknowledges that plan members and beneficiaries have a right to know how their contributions are spent and invested.

The annual report is our principal disclosure document. We maintain contact with members and beneficiaries through newsletters, annual statements, focus groups, surveys, presentations, meetings, and telephone discussions and correspondence. We are accountable to members dissatisfied with staff decisions through the benefits adjudication appeal process.

## Investments over \$20 million

AS AT DECEMBER 31, 1999

### FIXED INCOME

<i>(\$ Millions)</i>				
Type	Year of Maturity	Coupon (%)	Fair Value	Cost
Government of Canada bonds	2000-2029	5.00-13.00	\$ 9,041	\$ 9,393
Real return Canada bonds	2021-2031	4.00-4.25	3,604	3,321
Canadian corporate bonds	2000-2028	0.00-11.50	1,646	1,689
Securities purchased under agreements to resell	2000	4.75-4.95	992	991
Commercial paper	2000	4.85-5.55	782	780
Canadian treasury bills	2000-2001	4.57-5.69	667	663
Real return Canadian corporate bonds	2016-2031	5.38	521	505
United States Treasury Inflation Indexed Bonds	2008-2029	3.62-3.88	391	404
Foreign currency Canadian bonds	2001-2085	4.40-12.25	283	322
Index-linked mortgages	2018-2040	4.63-6.97	265	257
Real return Provincial bonds	2026-2026	4.50-4.50	265	264
Provincial bonds	2002-2029	5.50-9.75	245	263
International sovereign notes	2002-2011	5.00-10.00	235	259
United States treasury bonds	2004-2029	5.63-12.00	224	235
International corporate bonds	2009-2022	4.22-7.01	205	200
Discount instruments	2000	4.98-5.43	158	156
Term deposits	2000	4.60-5.05	94	94
United States treasury bills	2000	4.65-4.91	22	22
Securities sold under agreements to repurchase	2000	4.50-5.15	(2,883)	(2,879)

### PROVINCE OF ONTARIO DEBENTURES

<i>(\$ Millions)</i>			
Maturity Date	Coupon (%)	Fair Value	Cost
2000 to 2005	8.00-15.00	\$ 5,551	\$ 4,755
2006 to 2012	10.00-16.00	10,375	7,834
Total Debentures Net of Accrued Interest		15,926	12,589
Accrued Interest		402	402
<b>Total</b>		<b>\$16,328</b>	<b>\$12,991</b>

## Investments over \$20 million

AS AT DECEMBER 31, 1999

CORPORATE SHARES			CORPORATE SHARES		
(Millions)			(Millions)		
Security Name	Shares	Fair Value \$	Security Name	Shares	Fair Value \$
Nortel Networks Corporation	15.3	2,226.2	Alcatel	0.3	91.8
BCE Inc.	11.2	1,472.6	Power Corporation of Canada	3.7	91.2
Cadillac Fairview Corporation	16.5	561.9	Trizec Hahn Corporation	3.7	90.4
Toronto-Dominion Bank, The	13.8	534.6	Telesystem International Wireless Inc.	1.7	90.3
Maple Leaf Foods Inc.	37.9	530.2	Québecor Inc.	2.2	84.8
Royal Bank of Canada	7.2	455.0	XTRA Corporation	1.3	82.9
Seagram Company Ltd., The	6.3	406.4	Newbridge Networks Corporation	2.4	79.3
AT&T Canada Inc.	6.9	399.6	Mannesmann AG	0.2	78.9
Bank of Nova Scotia, The	11.6	361.7	ATI Technologies Inc.	4.0	77.0
Alcan Aluminium Limited	5.4	321.3	Invensys PLC	9.8	75.7
Imasco Limited	7.3	292.7	Abitibi-Consolidated Inc.	4.4	74.5
Bank of Montreal	5.5	269.5	Swatch Group AG, The	0.04	72.4
JDS Uniphase Corporation	1.2	269.1	Matsushita Electric Works, Ltd.	1.8	72.3
Canadian Imperial Bank of Commerce	7.7	265.8	National Bank of Canada	3.9	72.3
Barrick Gold Corporation	9.6	246.4	Sears Canada Inc.	1.8	72.1
Nokia AB (OY)	0.9	233.4	Canadian Natural Resources Limited	2.0	69.3
Canadian Pacific Limited	7.2	224.9	Kirby Corporation	2.3	69.1
Macerich Company, The	5.6	219.1	Anderson Exploration Ltd.	4.0	68.8
Celestica Inc.	2.7	214.7	NTT Mobile Communications Network Inc. NPV	0.001	68.5
Encal Energy Ltd.	31.1	205.5	Gulf Canada Resources Limited	14.3	68.0
Bombardier Inc.	6.8	201.9	Deutsche Telekom AG	0.7	67.5
Canadian National Railway Company	5.1	195.3	Canadian Occidental Petroleum Ltd.	2.4	67.2
Petro-Canada	8.1	166.0	Canadian Tire Corporation Limited	2.0	67.1
Suncor Energy Inc.	2.7	162.1	Telecomunicacoes Brasileiras S.A.	0.3	64.4
Fairfax Financial Holdings Limited	0.7	161.9	Shell Transport & Trading Company	5.3	63.6
Inco Limited	4.5	151.5	Renaissance Energy Ltd.	4.4	63.5
Total Fina SA	0.8	146.9	Le Groupe Videotron Ltée	2.5	62.4
Thomson Corporation, The	3.7	142.2	Noranda Inc.	3.2	61.9
Talisman Energy Inc.	3.8	140.3	KPN NV	0.4	61.1
Alberta Energy Company Ltd.	3.1	138.9	BioChem Pharma Inc.	1.9	60.6
Hitachi Ltd.	5.9	137.7	George Weston Limited	1.1	60.3
TransCanada PipeLines Limited	10.8	134.9	Singapore Airlines Ltd.	3.7	60.2
Rogers Communications Inc.	3.8	134.8	Québecor Printing Inc.	1.8	59.6
Magna International Inc.	2.1	123.0	Research in Motion Limited	0.9	59.3
Sony Corporation	0.3	121.4	Deutsche Bank AG	0.5	58.5
Telefonos de Mexico SA	0.7	113.6	ABN Amro Holding NV	1.6	58.2
NOVA Chemicals Corporation	4.0	113.6	Aliant Inc.	2.3	57.3
Enbridge Inc.	3.9	111.6	EdperBrascan Corporation	2.9	56.1
Manulife Financial Corporation	6.0	111.1	Shaw Communications Inc.	1.2	56.1
United Dominion Industries Limited	3.9	110.5	UCAR International Inc.	2.2	55.4
Westjet Airlines Ltd.	5.5	103.2	Bayer AG	0.8	55.4
Falconbridge Limited	3.9	100.8	The News Corporation Limited	4.1	54.8
Placer Dome Inc.	6.5	99.8	Power Financial Corporation	2.3	54.2
QLT PhotoTherapeutics Inc.	1.2	98.2	BOC Group plc	1.7	54.2
BCT.Telus Communications Inc.	2.8	97.1	Laidlaw Inc.	7.2	54.2
Imperial Oil Limited	3.1	96.8	Pechiney SA	0.5	54.0
Hutchison Whampoa Limited	4.6	96.3	DBS Group Holdings Limited	2.3	53.4
Donohue Inc.	3.6	95.6	Portugal Telecom SA	3.3	52.7
Telecom Italia SpA	8.1	95.2	Siemens AG	0.3	52.2
ATS Automation Tooling Systems Inc.	3.9	94.0	G.T.C. Transcontinental Group Ltd.	2.7	52.1
Agrium Inc.	8.3	93.3	Franco-Nevada Mining Corporation Limited	2.3	50.8
Potash Corporation of Saskatchewan Inc.	1.3	92.8			
HSBC Holdings	4.6	92.1			



# Investments over \$20 million

As at December 31, 1999

## CORPORATE SHARES

(Millions)

Security Name	Shares	Fair Value \$
C-MAC Industries Inc.	0.6	50.4
Teleglobe Inc.	1.5	50.3
Loblaw Companies Limited	1.4	50.2
Embratel Participacoes S.A.	58.8	50.1
CGI Group Inc., The	0.8	49.9
Marks & Spencer PLC	7.2	49.6
Westcoast Energy Inc.	2.1	49.4
Onex Corporation	0.9	48.4
National Australia Bank Limited	2.2	47.7
Fuji Photo Film	0.9	47.0
Co-Steel Inc.	2.8	46.8
Corus Group PLC	12.5	46.8
Lindsay Manufacturing Co.	1.7	45.7
Jardine Strategic Holdings Ltd.	15.8	45.5
Sonera Oyj	0.5	45.2
Molson Inc.	1.7	44.8
Aventis S.A.	0.5	44.7
Goldcorp Inc.	5.2	44.0
Cable & Wireless PLC	9.4	44.0
Kyocera Corporation	0.1	43.3
Dofasco Inc.	1.5	43.2
Mitel Corporation	2.2	43.1
Nintendo Company Ltd.	0.2	42.3
DSM NV	0.7	41.7
Interstate Bakeries Corporation	1.6	41.7
Swire Pacific Ltd.	5.0	41.6
Veba AG	0.6	41.6
Australia & New Zealand Banking Group Limited	3.9	41.5
Wolters Kluwer	0.8	41.3
Marconi PLC	1.6	41.2
Royal Group Technologies Limited	1.3	41.0
BCE Emergis Inc.	0.5	40.9
Rio Algom Limited	1.9	40.7
UPM-Kymmene Oyj	0.7	40.7
Telecom Corporation of New Zealand Limited	5.9	39.8
ENI SpA	5.0	39.8
Teva Pharmaceutical Industries Ltd.	0.4	39.6
Cominco Ltd.	1.3	39.5
ING Groep N.V.	0.5	39.2
Transalta Corporation	2.7	38.7
De Beers Consolidated Mines	0.9	38.2
Great-West Lifeco Inc.	1.6	37.9
Ballard Power Systems Inc.	0.9	37.9
Tokyo Electron Ltd.	0.2	37.6
Air Canada	3.6	37.5
Cognos Incorporated	0.6	37.1
Koninklijke (Royal) Philips Electronics N.V.	0.2	37.0
Electrolux AB	1.0	36.9
Svenska Handelsbanken	2.0	36.9
Broken Hill Proprietary Company Limited	1.9	36.8

## CORPORATE SHARES

(Millions)

Security Name	Shares	Fair Value \$
Tate & Lyle PLC	3.9	36.6
STMicroelectronics N.V.	0.2	36.2
MacKenzie Financial Corporation	2.0	36.2
ROHM Company Limited	0.1	36.2
National Westminster Bank PLC	1.2	36.1
Bayerische Motoren Werke (BMW) AG	0.8	36.1
Precision Drilling Corporation	1.0	35.8
BPB PLC	4.3	35.7
Novartis AG	0.02	35.3
Telefonica De Argentina S.A.	0.8	35.1
Tembec Inc.	2.1	34.2
Geac Computer Corporation Limited	1.2	34.0
First Sierra Financial Inc.	1.4	33.9
MDS Inc.	1.1	33.6
Iberdrola S.A.	1.7	33.5
Murata Manufacturing Company Ltd.	0.1	33.2
Allied Zurich PLC	2.0	33.2
Biovail Corporation International	0.2	33.1
Penn West Petroleum Ltd.	1.2	32.7
Advanest Corporation	0.1	32.1
British American Tobacco PLC	2.9	31.8
DuPont Canada Inc.	0.5	31.7
National Power PLC	3.8	31.5
Johnson Electric Holdings Ltd.	3.4	31.4
CLP Holdings Limited	4.6	30.9
Novo Nordisk A/S	0.2	30.6
Petroleo Brasileiro S.A.	0.8	30.5
Teck Corporation	2.2	30.1
Call-Net Enterprises Inc.	5.8	30.0
Fiat SpA	0.8	29.8
Cheung Kong (Holding) Ltd.	1.8	29.7
Swisscom AG	0.1	29.6
Manitoba Telecom Services Inc.	1.4	29.4
Nippon Telegraph & Telephone Corporation (NTT)	0.001	29.3
Nexfor Inc.	3.5	29.3
Domtar Inc.	1.7	29.2
Intertape Polymer Group Inc.	0.7	29.1
ABB Ltd.	0.2	28.6
Centrais Electricas Brasileiras S.A.	1.8	28.6
Kurita Water Industries Ltd.	1.2	28.4
Nestle SA	0.01	28.3
Canadian Utilities Limited	0.7	28.0
Norsk Hydro ASA	0.5	28.0
Aegon N.V.	0.2	27.9
Clarica Life Insurance Co.	1.1	27.8
Telstra Corporation Limited	3.5	27.8
Acktion Corporation	2.2	27.8
Crestar Energy Inc.	1.4	27.8
NS Power Holdings Incorporated	1.9	27.6
Wolverine Tube Inc.	1.3	27.5
Corel Corporation	1.2	27.3
Barclays PLC	0.7	27.2

## Investments over \$20 million

AS AT DECEMBER 31, 1999

CORPORATE SHARES			CORPORATE SHARES		
(Millions)			(Millions)		
Security Name	Shares	Fair Value \$	Security Name	Shares	Fair Value \$
Hudson's Bay Company	1.6	27.2	Royal & Sun Alliance Insurance Group PLC	2.1	23.0
Daiichi Pharmaceutical Co., Ltd.	1.4	26.9	Finning International Inc.	1.7	23.0
The Tokio Marine & Fire Insurance Co. Ltd.	1.6	26.8	ASM Lithography Holding N.V.	0.1	22.9
St. Laurent Paperboard Inc.	1.4	26.7	Akzo Nobel N.V.	0.3	22.9
Societe Television Francaise 1	0.03	26.3	Shell Canada Limited	0.8	22.6
Repsol-YPF S.A.	0.8	26.2	Den Danske Bank	0.1	22.6
Diageo plc	2.3	26.2	NEC Corporation	0.7	22.5
BASF AG	0.3	25.9	IPSCO Inc.	0.8	22.4
Wolseley PLC	2.3	25.7	Singapore Press Holdings Ltd.	0.7	22.4
Canfor Corporation	1.5	25.6	John Wiley & Sons Inc.	0.9	22.4
Moore Corporation Limited	3.0	25.5	Fort Chicago Energy Partners L.P.	3.1	22.3
Endesa S.A.	0.9	25.5	Taiwan Semiconductor Manufacturing Company Ltd.	0.3	22.0
Cleartnet Communications Inc.	0.5	25.5	Crawford & Company	1.2	21.8
CAE Inc.	2.6	25.5	Burlington Resources Inc.	0.5	21.8
Samsung Electronics	0.1	25.4	BG Group PLC	2.4	21.8
Rio Alto Exploration Ltd.	1.2	25.2	Carter Holt Harvey Limited	11.5	21.8
Elan Corporation PLC	0.6	25.0	Stelco Inc.	2.0	21.7
AstraZeneca Group PLC	0.4	24.9	Meditrust Companies	2.7	21.5
Investors Group Inc.	1.2	24.6	Tomkins plc	4.6	21.5
Cascades Inc.	2.8	24.5	CIT Group Inc.	0.7	21.5
Axa-UAP	0.1	24.3	Allied Irish Banks plc	1.3	21.1
Fujitsu Limited	0.4	24.2	Billiton PLC	2.5	21.1
South China Morning Post (Holdings) Limited	19.3	24.0	Slocan Forest Products Ltd.	1.7	20.9
J Sainsbury PLC	2.9	24.0	CRH PLC	0.7	20.8
Atco Ltd.	0.6	23.9	Volkswagen AG	0.3	20.7
Four Seasons Hotels Inc.	0.3	23.8	Intrawest Corporation	0.8	20.5
Cookson Group PLC	3.9	23.6	Telefonaktiebolaget LM Ericsson	0.2	20.3
Sun Hung Kai Properties Ltd.	1.5	23.2	Korea Telecom Corporation	0.2	20.2
Muenchener Rueckversicherungs-Gesellschaft AG	0.1	23.2	Hirose Electric Co. Ltd.	0.1	20.2
CEI Citicorp Holdings S.A.	4.4	23.1	Westair Corporation, The	2.9	20.2
			Unidanmark A/S	0.2	20.1
			Ensign Resource Service Group Inc.	0.6	20.1

### CONVERTIBLE AND EXCHANGEABLE DEBENTURES

(Millions)		
Security Name	Par Value (\$)	Fair Value (\$)
Power Financial Corporation 8.0% Due April 30, 2014	85.5	583.4
PDFB Investments Inc. 3.25% Due March 12, 2018	56.4	105.2
Telecom Telesystem Ltd. 5.44% Due November 18, 2002	21.3	100.9
George Weston Ltd. 3% Due June 30, 2023	13.0	21.8

# Investments over \$20 million

As at December 31, 1999

## REAL ESTATE PORTFOLIO

Property	Total Square Footage	Effective % Ownership
	(in thousands)	
<b>Canadian Regional Shopping Centres</b>		
Fairview Park Mall, Kitchener	745	75.0%
Georgian Mall, Barrie	532	75.0%
Hillcrest Mall, Richmond Hill	552	100.0%
Intercity Shopping Centre, Thunder Bay	447	100.0%
Markville Shopping Centre, Markham	971	100.0%
New Sudbury Centre, Sudbury	491	100.0%
Polo Park Mall, Winnipeg	1,200	100.0%
Southland Mall, Regina	408	100.0%
Chinook Centre, Calgary	1,117	100.0%
Richmond Centre, Vancouver	488	100.0%
<b>Canadian Office and Other Properties</b>		
1 Queen Street East and 20 Richmond Street East, Toronto	518	50.0%
Granville Square, Vancouver	411	100.0%
The Station, Vancouver	162	100.0%
Waterfront Centre, Vancouver	408	100.0%
Shell Centre, Calgary	692	50.0%
Granville Square II, Vancouver	—	50.0%
<b>U.S. Regional Shopping Centres</b>		
Cascade Mall, Burlington, Washington	583	49.0%
Kitsap Mall, Silverdale, Washington	850	49.0%
Lakewood Center, Lakewood, California	1,851	49.0%
Los Cerritos Center, Cerritos, California	1,302	49.0%
Redmond Town Center, Redmond, Washington	1,183	49.0%
Stonewood Mall, Downey, California	927	49.0%
Washington Square, Tigard, Oregon	1,452	49.0%

## PRIVATE COMPANIES AND PARTNERSHIPS

ABCO Holdings Corp.	Exxel Capital Partners V, L.P.	Newcastle Capital Management Inc.
Absolute Return Fund Ltd.	Fitness Holdings Worldwide Inc.	Phoenix Equity Partners II
Algorithmics Incorporated	Forest Global Convertible Fund, Ltd.	Providence Equity Partners
Apacuogue Limited	Friedrich Grohe AG	Fund II, L.P.
ARC Canadian Energy Venture Fund	Hicks, Muse, Tate & Furst Latin	Providence Equity Partners
BC European Capital V	America Fund, L.P.	Fund III, L.P.
BC European Capital VI	HLF Insurance Holdings Ltd.	Providence Media Partners, L.P.
CACF Limited	JPM Nippon Neutral Fund, Ltd.	RNG Group
CDC Global Asset Allocation Series	Maple Leaf Sports & Entertainment	Schroder Asia Pacific Fund II
DLJ Merchant Banking Partners II, L.P.	Ltd.	Schroder Asian Properties LP.
Elis S.A.	Maple Partners Financial Group Inc.	The Macerich Company
Enron Energy Services, Inc.	Morgan Stanley Real Estate Fund III	WGTC Limited
Entertainment Depot L.P.	International L.P.	

# Ten-Year Review

FOR THE YEAR ENDED DECEMBER 31

(\$ Millions)	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
<b>CHANGE IN NET ASSETS</b>										
<b>Income</b>										
Investment income	\$10,121	\$ 5,137	\$ 7,246	\$ 7,436	\$ 5,656	\$ 528	\$ 5,907	\$ 2,145	\$ 3,843	\$ 1,031
Contributions										
Members	620	607	582	610	615	674	647	655	597	526
Province of Ontario	655	653	649	673	669	704	712	740	663	587
– special payments	128	492	456	152	—	—	—	438	270	187
Repayment of refunds and transfers	10	5	9	10	21	58	42	56	54	33
<b>Total Income</b>	<b>11,534</b>	<b>6,894</b>	<b>8,942</b>	<b>8,881</b>	<b>6,961</b>	<b>1,964</b>	<b>7,308</b>	<b>4,034</b>	<b>5,427</b>	<b>2,364</b>
<b>Expenditures</b>										
Benefits paid	2,278	2,103	1,802	1,520	1,261	1,130	1,001	921	829	760
Investment expenses	91	67	59	40	30	25	20	14	7	1
Member service expenses	33	32	31	29	27	26	24	23	18	19
Distribution of gain	—	—	—	—	—	—	325	—	—	—
<b>Total Expenditures</b>	<b>2,402</b>	<b>2,202</b>	<b>1,892</b>	<b>1,589</b>	<b>1,318</b>	<b>1,181</b>	<b>1,370</b>	<b>958</b>	<b>854</b>	<b>780</b>
<b>INCREASE IN NET ASSETS</b>	<b>\$ 9,132</b>	<b>\$ 4,692</b>	<b>\$ 7,050</b>	<b>\$ 7,292</b>	<b>\$ 5,643</b>	<b>\$ 783</b>	<b>\$ 5,938</b>	<b>\$ 3,076</b>	<b>\$ 4,573</b>	<b>\$ 1,584</b>
<b>NET ASSETS</b>										
<b>Investments</b>										
Fixed income	\$17,474	\$14,495	\$11,873	\$11,688	\$13,573	\$12,062	\$18,117	\$19,464	\$19,215	\$18,129
Equities – Canadian	18,667	17,613	19,433	17,367	12,218	9,943	7,510	3,217	2,618	520
– Foreign	28,491	24,416	20,081	16,005	12,287	10,714	7,035	3,253	1,796	807
– Real Estate	2,454	1,582	1,561	1,272	925	694	608	451	180	—
	<b>67,086</b>	<b>58,106</b>	<b>52,948</b>	<b>46,332</b>	<b>39,003</b>	<b>33,413</b>	<b>33,270</b>	<b>26,385</b>	<b>23,809</b>	<b>19,456</b>
Receivable from Province of Ontario	1,252	1,233	1,262	1,286	1,308	1,338	1,362	1,323	1,190	945
Other assets	7,028	5,391	8,537	3,293	1,586	622	36	72	10	—
<b>Total assets</b>	<b>75,366</b>	<b>64,730</b>	<b>62,747</b>	<b>50,911</b>	<b>41,897</b>	<b>35,373</b>	<b>34,668</b>	<b>27,780</b>	<b>25,009</b>	<b>20,401</b>
Liabilities	(7,063)	(5,559)	(8,268)	(3,482)	(1,760)	(879)	(957)	(7)	(312)	(277)
<b>Net Assets</b>	<b>\$68,303</b>	<b>\$59,171</b>	<b>\$54,479</b>	<b>\$47,429</b>	<b>\$40,137</b>	<b>\$34,494</b>	<b>\$33,711</b>	<b>\$27,773</b>	<b>\$24,697</b>	<b>\$20,124</b>
Smoothing reserve	(7,264)	(4,788)	(5,578)	(4,416)	(1,907)	(252)	(2,947)	.. (414)	(883)	709
Actuarial value of net assets	61,039	54,383	48,901	43,013	38,230	34,242	30,764	27,359	23,814	20,833
Accrued pension benefits	52,105	48,636	44,457	41,833	38,744	36,848	33,998	30,781	27,479	24,391
<b>Surplus (Deficiency)</b>	<b>\$ 8,934</b>	<b>\$ 5,747</b>	<b>\$ 4,444</b>	<b>\$ 1,180</b>	<b>\$ (514)</b>	<b>\$ (2,606)</b>	<b>\$ (3,234)</b>	<b>\$ (3,422)</b>	<b>\$ (3,665)</b>	<b>\$ (3,558)</b>
<b>PERFORMANCE (%)</b>										
Rate of return	17.4	9.9	15.6	19.0	16.9	1.7	21.7	8.9	19.6	5.6
Benchmark	17.6	11.9	15.6	18.1	17.2	(0.3)	20.5	8.0	15.4	—
Long-term goal	6.6	5.5	5.2	6.7	6.2	4.7	6.2	6.6	8.3	9.5



## Corporate Directory

### **President and Chief Executive Officer:**

Claude Lamoureux

### **Investments:**

Senior Vice-President, Robert Bertram

### **Equities:**

Vice-President, Brian Gibson

### **Merchant Banking:**

Vice-President, Michael Lay

### **Real Estate:**

Vice-President, Brian Muzyk

### **Quantitative Investments:**

Vice-President, Morgan McCague

### **International Equity Indexes,**

### **Fixed Income and Foreign Exchange:**

Vice-President, Neil Petroff

### **Research and Economics:**

Vice-President, Leo de Bever

### **Member Services:**

Senior Vice-President and  
Chief Information Officer, Allan Reesor

### **Client Services:**

Vice-President, Rosemarie McClean

### **Human Resources and Public Affairs:**

Vice-President, John Brennan

### **Finance:**

Vice-President, Andrew Jones

### **Law:**

Vice-President, General Counsel  
and Secretary, Roger Barton

### **Internal Audit:**

Vice-President, Peter Maher

*We welcome your comments and suggestions  
for this annual report, as well as other aspects  
of our communications program. Please call  
Lee Fullerton, Communications Manager  
at 416-730-5347.  
e-mail: [communications@otpp.com](mailto:communications@otpp.com)*

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Toronto, Ontario M2M 4H5  
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CA20N  
DE180  
- T11



Teachers'  
Pension Plan  
Board

Conseil du régime  
de retraite des enseignants  
et des enseignantes

# 20

A N N U A L

21ST CENTURY

Government  
Publications

ENSURING TEACHERS'

RETIREMENT

R E P O R T

FOR THE 21ST CENTURY

NO TEACHERS' RETI

SECURITY

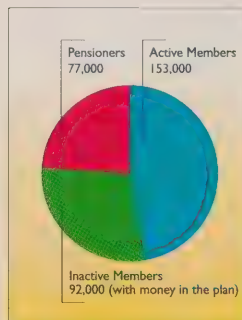
ENSURIN

THE 21ST CENTURY

21ST CENTURY

OUTSTANDING  
SERVICE TODAY,  
RETIREMENT SECURITY  
TOMORROW

Member Profile



## CORPORATE PROFILE

The Ontario Teachers' Pension Plan Board is responsible for the future retirement income of 153,000 elementary and secondary school teachers, 77,000 retired teachers and their survivors, and 92,000 former teachers with entitlements in the plan. The plan is sponsored by a partnership between the Ontario government and the plan members, represented by the Ontario Teachers' Federation. The co-sponsors negotiate the use of surplus and have an equal say in the plan's design, including changes in benefits.

The pension board's current asset-mix policy is 60 percent equities, such as shares in public and private companies and equity-return derivative contracts; 22 percent inflation-sensitive assets such as real estate, real-rate bonds and commodities; and 18 percent fixed-income securities, largely federal and provincial government bonds.

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	CORPORATE DIRECTORY



# FINANCIAL HIGHLIGHTS

AS AT DECEMBER 31

## INVESTMENT PERFORMANCE

Rate of return on investments (%)	2000	1999
Annual	9.3%	17.4%
Composite benchmark	5.3	17.6
Four-year average	13.0	15.4
Four-year benchmark	12.5	15.8

### Average annual compound rates of return (%)

	1 yr	4 yr	5 yr	10 yr	SINCE INCEPTION
Our return	9.3	13.0	14.2	13.8	13.1
Benchmark	5.3	12.5	13.6	12.7	10.7

## Rates of Return



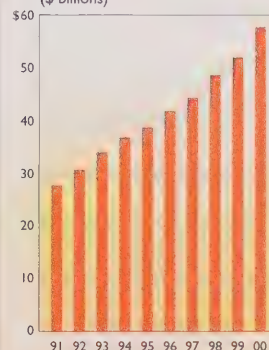
## FINANCIAL OVERVIEW

(\$ Billions)	2000	1999 <sup>2</sup>
Net investments	\$ 72.0	\$ 67.1
Net receivables	1.1	1.2
Net assets	73.1	68.3
Smoothing reserve <sup>1</sup>	4.3	8.3
Actuarially adjusted net assets	68.8	60.0
Cost of future pensions	58.6	52.1
Surplus	\$ 10.2	\$ 7.9

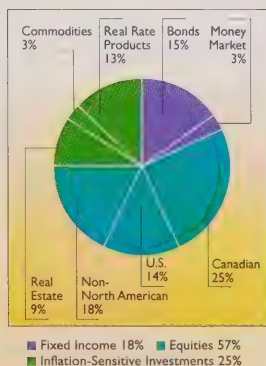
<sup>1</sup> We smooth equity gains (or losses) over five years to reduce the impact of market volatility on plan surplus. The smoothing reserve consists of investment gains in excess of the rate of return assumptions used in the financial statement valuation.

<sup>2</sup> Restated

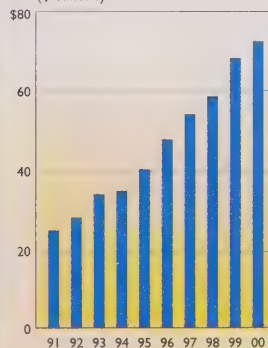
## Cost of Future Pensions (as at December 31) (\$ billions)



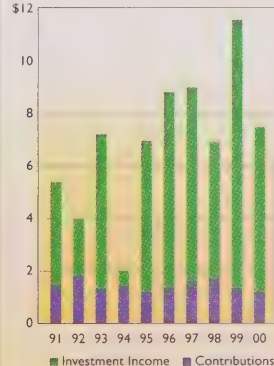
## Asset Mix (as at December 31, 2000)



## Net Assets (as at December 31) (\$ billions)



## Income (\$ billions)





ROBERT W. KORTHALS  
CHAIR

Financial markets were highly volatile in 2000, a trend we expect to continue. Despite the less reliable investment climate, the pension board's investment staff have done a great

job of creating value by exceeding market returns.

Since 1990, strong stock markets around the world have helped the fund grow faster than the increase in the cost of future pension benefits. However, what has really made the difference are deliberate decisions that allowed us to do better than the market.

Over the past decade we have gained exposure to foreign markets through equity-based derivatives and partnerships with external managers to earn value-added returns from active equity selection. We have built one of the largest merchant banks in Canada to earn premium returns from private equity markets. We have introduced innovative portfolio management techniques to earn above-market returns from equity and fixed-income index funds. Most recently, we purchased The Cadillac Fairview Corporation, making us one of the largest Canadian owners of North American real estate.

#### BEST-EVER VALUE ADDED

These and other initiatives paid off handsomely in 2000, with portfolio managers achieving \$2.6 billion in value added. This amount is the difference between the total fund return of 9.3 percent and the 5.3 percent return for the composite benchmark. All this confirms the importance of actively managing the asset base and rewarding investment managers and senior executives for their effort.

Looking back at the value added to the fund over the last four years, the investment team averaged 13 percent against a benchmark of 12.5 percent. Since inception, they averaged 13.1 percent, beating the benchmark of 10.7 by 2.4 percent. In dollar terms, that

means our investment team has created \$6 billion in value added since 1990.

On behalf of the Board of Directors, I want to congratulate our entire investment team for their professionalism, foresight and innovation to meet the growing needs of the pension plan with value added investment income. It has been, and continues to be, a job well done.

#### AVOIDING UNDUE LOSS

The emphasis on maximizing returns also means trying to avoid unnecessary losses when markets turn for the worse. It is difficult, of course, for a large investment fund to predict short-term trends. Nevertheless, the pension board is attentive to prudent opportunities.

A good example in 2000 concerned technology stocks. Going into the year, we believed that most technology stocks were overvalued. The pension board took proactive action by reducing its technology holdings in Canadian and American stocks. As a result, we avoided substantial losses that would otherwise have occurred.

##### Managing Our Technology Exposure

(percent)	Q1	Q2	Q3	Q4
Technology Stocks				
% of TSE 300 Index	31.1	41.5	38.4	26.0
% Underweight in our portfolios	3.4	4.8	5.8	3.6

We reduced our exposure to technology stocks as a percentage of the TSE 300 Index throughout 2000.

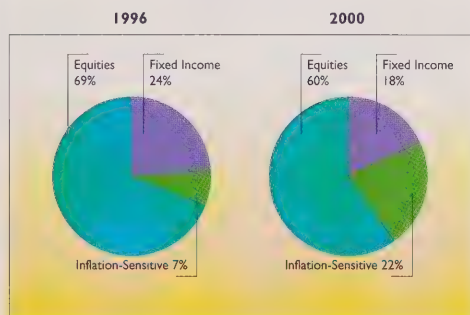
#### PROTECTING THE FUND

Finding ways to add value by maximizing returns without incurring undue loss is a priority in view of the increasing number of pensioners. Since the mid-1990s, we have modified our investment approach to meet the changing needs of the pension plan.

Our asset mix continues to shift from equities and bonds to inflation-sensitive assets, especially commercial real estate properties, real-rate bonds and

commodities. These investment classes have been chosen specifically for their ability to rise in value with inflation, mitigating the long-term cost impact of inflation on growing liabilities, and safeguarding the fund if current expectations of lower returns from investment in stocks over the next decade are realized.

#### Asset-Mix Policy



The asset-mix policy has changed over the past five years as we strive to better match assets that react to inflation with the indexed nature of pension benefits.

#### ACKNOWLEDGEMENTS

We are pleased with the investment performance of the pension fund in 2000 and prior years, and remain confident that our investment strategy, implemented by innovative portfolio managers, will continue to add value to the fund. We are impressed with the progress made to provide members of the plan with faster, more personalized service.

We are also pleased that both partners recognize the need for a strong and independent Board of Directors to oversee the pension board. We thank them for appointing directors with the skills and knowledge relevant to governing both a large investment and customer service organization.

**ROBERT W. KORTHALS**

CHAIR



**ROBERT W. KORTHALS**

Former President of the Toronto-Dominion Bank  
*Chair of the Board and Chair of Human Resources and Compensation Committee*



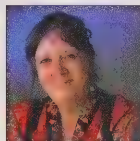
**JALYNN H. BENNETT**

President of Jalynn H. Bennett & Associates Ltd., a consulting firm specializing in strategic planning and organizational development  
*Chair of the Investment Committee and member of the Governance Committee*



**GEOFFREY W. CLARKSON**

Fellow of the Institute of Chartered Accountants of Ontario and former senior partner with Ernst & Young  
*Chair of the Benefits Adjudication Committee and member of the Audit and Actuarial Committee*



**ANN FINLAYSON**

Journalist, speaker, freelance editor and consultant, author of three books, including *Whose Money is it Anyway? The Showdown on Pensions* (1988)  
*Member of the Audit and Actuarial Committee*



**LUCY G. GREENE**

Former Vice-President of Human Resources with Sun Life Assurance Company of Canada  
*Chair of the Governance Committee and Vice-Chair of the Benefits Adjudication Committee*



**JOHN S. LANE**

Former Senior Vice-President of Investments for Sun Life Assurance Company of Canada, and a Chartered Financial Analyst  
*Member of the Audit and Actuarial Committee*



**RALPH E. LEAN, Q.C.**

Senior partner with the law firm Cassels Brock & Blackwell in Toronto  
*Member of the Governance Committee*



**DAVID J. LENNOX**

Former Secretary of the Ontario Public School Teachers' Federation, former school principal  
*Chair of the Audit and Actuarial Committee*



**GARY PORTER**

Chartered accountant and founding partner of the accounting firm Porter Héту International, and a past president of the Certified General Accountants Association of Ontario  
*Member of the Audit and Actuarial and Governance Committees*

*All board members serve on the Investment and the Human Resources and Compensation Committees.*





**CLAUDE LAMOUREUX**  
PRESIDENT AND CHIEF  
EXECUTIVE OFFICER

The pension plan enjoyed another strong year in 2000, despite the negative performance of foreign equity markets, where we had about one-third of our assets invested. The total fund return of

9.3 percent produced \$6.2 billion in investment income, increasing the value of net assets to \$73.1 billion at year end. These results compared with a 17.4 percent total fund return and \$10.1 billion in investment income in 1999.

#### IMPORTANCE OF THE FUNDING SURPLUS

As most readers of annual reports know, the most important number is often hidden in a footnote in the back of the report. This report is no exception – if you look at page 41, you'll find the surplus based on the funding valuation. I want to explain its significance and the resulting funding surplus. It is this figure – the funding surplus – that is particularly important to active and retired teachers because it is the amount available to the co-sponsors for plan changes.

However, in our annual report, we focus on the "financial surplus" for financial statement purposes (sometimes called "management's best-estimate"). Both the annual and funding valuations look to the future, estimating the length of a teaching career, inflation and salary increases, and how long teachers will live. However, the annual valuation only looks at the financial situation at year-end and does not include the benefits that members will accrue in the future. For example, if a teacher taught for 10 years, the financial statement surplus takes into account that the plan has enough money to pay the pension equivalent for 10 years' credit.

The funding valuation, used to determine the funding surplus available to spend on benefit improvements, is a different calculation. In addition to the

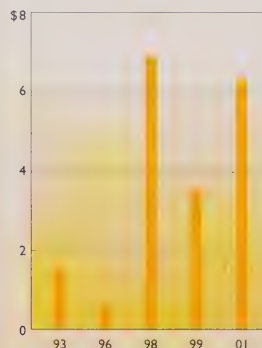
factors already mentioned, the funding valuation takes into account the pension that will be earned in the future, not just what has been earned up to the end of last year. In comparison, if a teacher taught for 10 years, the funding valuation includes 10 years of credit plus estimates how much money will be needed to pay the pension if he or she teaches to the 85 factor in 20 more years. It also includes how much more the teacher and the government will contribute over that time, and how much investments will grow.

#### USE OF SURPLUS

In 1998, the Ontario Teachers' Federation (OTF) and the Ontario government signed an agreement under which they improved benefits and allowed the government to use surplus to eliminate the special payments it was making to pay off the pre-1990 unfunded liability. This occurred in 1998 and 1999. The OTF would then receive a similar amount, set at \$6.2 billion, for use at its discretion.

The plan started 2001 with a funding surplus of \$6.8 billion. Effective April 1 2001, \$6.2 billion of this surplus will be used by the OTF to improve benefits.

**Funding Surplus Shared by Partners**  
(\$ billions)



The partners will have used \$18.7 billion in surplus by April 2001 to pay off the pre-1990 unfunded liability and make benefit improvements, including early retirement incentives.



A funding valuation by an independent actuary is required at least every three years. It determines whether the plan has sufficient funds to meet all future pension obligations resulting in a funding surplus or deficit, and is used as a guide to set contribution rates.

The funding valuation is a comprehensive calculation about the pension plan's financial future. It estimates the length of a teaching career, inflation and salary increases, teacher and government contributions over the length of a career, how long teachers will live, and how much investments will grow in the future.

The accompanying chart demonstrates how the funding valuation surplus is calculated.

#### Funding Valuation Results (before surplus allocation)

(\$ Billions) (at January 1)	2001	2000	1999	1998	1996	1993	1990
Net assets	73.1	68.3	59.1	54.5	40.1	29.4	21.0
Smoothing reserve	4.3	7.3	5.1	6.0	1.8	—	—
Value of assets	68.8	61.0	54.0	48.5	38.3	29.4	21.0
Future contributions	14.4	13.4	12.0	12.6	14.5	14.3	12.2
Future special payments*	—	—	3.7	8.5	8.4	8.4	—
Actuarial assets	83.2	74.4	69.7	69.6	61.2	52.1	33.2
Future benefits	76.4	69.8	66.2	62.8	60.5	50.6	41.0
Surplus (deficit)	6.8	4.6	3.5	6.8	0.7	1.5	(7.8)

\* Payments by the government toward the pre-1990 unfunded liability.

Most of the surplus will be used in April 2001 to improve benefits, including a permanent 85 factor.

**Value of assets** is the value of net assets minus the smoothing reserve.

**Actuarial assets** refers to the value of assets as determined by the market plus the present value of future contributions by existing plan members.

**Future benefits** is an actuarial estimate of what it will cost to pay promised pensions over the lifetime of all current members. The cost fluctuates with market conditions and is not smoothed.

**Surplus** refers to the "funding surplus" (or deficit) above the cost of all future pension benefits for current members.

#### ASSUMPTIONS

Underlying the valuation are economic and demographic assumptions. The three most important assumptions are identified in the accompanying table.

#### Funding Valuation Assumptions

(percent) (at January 1)	2001	2000	1999	1998	1996	1993	1990
Discount rate	6.25	6.5	7.5	7.5	8.0	8.0	8.5
Salary escalation	3.20	3.25	4.5 <sup>2</sup>	4.5 <sup>1</sup>	5.0	5.0 <sup>1</sup>	5.75
Inflation rates	2.20	2.25	3.5 <sup>3</sup>	3.5 <sup>1</sup>	4.0	4.0 <sup>1</sup>	4.5

<sup>1</sup> except 2% for 2 years.

<sup>2</sup> except 2% for 2 years, 3.25% for 1 year

<sup>3</sup> except 2% for 2 years, 2.75% for 1 year

Salary changes affect the cost of future benefits because pension calculations are based on each member's best five years' salary. Pensions are fully indexed to inflation, which also increases pension costs.

Starting in 2000, we use the same assumptions for the annual valuation included in the financial statements.

**Discount rate** refers to the long-term market rate of return used to determine the present value of all future pension benefits and assets. It is assumed, as shown in the chart, that the discount rate will exceed inflation by approximately four percent.

**Salary escalation and inflation rates** It is assumed that, over the long term, increases in teachers' salaries will exceed inflation by one percent.

Even a seemingly small economic or demographic change can have a major impact on the plan's funding position. For example, a male teacher retiring at 57 years of age in 1995 had a life expectancy of 24.0 years, compared with 25.1 years for a similarly aged male teacher retiring in 2000. Changing the assumptions to reflect this improvement in the mortality experience of male retirees increases the plan's liability costs by \$800 million.

#### PARTNERSHIP

As sole plan sponsor from 1917 until 1992, the Ontario government was responsible for all funding deficits and entitled to all funding surplus.

In 1992, the Ontario Teachers' Federation negotiated a partnership with the government. Teachers are now responsible for half of any surplus or deficit. As stated earlier, the partners negotiate the use of surplus and also have an equal say in the plan's design, including changes in benefits. The past use of actuarial surplus is discussed in note 9 to the financial statements.

### NEED FOR A SURPLUS POLICY

Since 1990, whenever a funding surplus has existed, it has been used to eliminate special contributions or increase benefits.

The partners know this level of yearly surplus creation is not sustainable. We are very concerned that current contribution rates will not be sufficient to cover the cost of future benefits, particularly if our current market forecasts for the next 10 years prove correct.

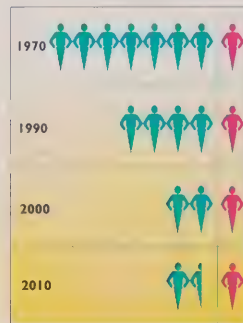
We encourage the partners to create a surplus policy, and we will commit resources to assist them. This policy would include the level above which the funding surplus would be used, and would be similar to the legislated capital reserve policies for banks and insurance companies. This would help to ensure some stability for contribution rates.

We believe it is essential to begin working today on a policy for the future because, if the plan is underfunded at a statutory valuation in the future, it will be the responsibility of the partners to make up the shortfall.

**Small surplus** The present value of all pensions is rising rapidly as the plan matures, totalling \$76.4 billion at January 1, 2001. Sufficient assets were in place to meet these obligations with actuarially valued assets of \$68.8 billion and future contributions valued at \$14.4 billion, leaving a surplus of \$6.8 billion. After these funds are assigned to plan improvements in April 2001, the plan will have only a small surplus of \$600 million, less than one percent of liabilities.

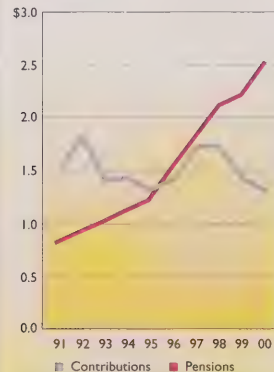
**Changing profile** The profile of the plan has changed leaving fewer contributors while the number of teachers on pension continues to grow. Therefore, even an increase in contribution rates will have a reduced ability to compensate for a deficit. Ten years ago, future contributions were sufficient to cover about one-third of future benefits. Today, those contributions would only cover 19 percent.

Active Members vs. Pensioners



With only two active members for every pensioner today, there are half as many contributors per retiree as there were 10 years ago.

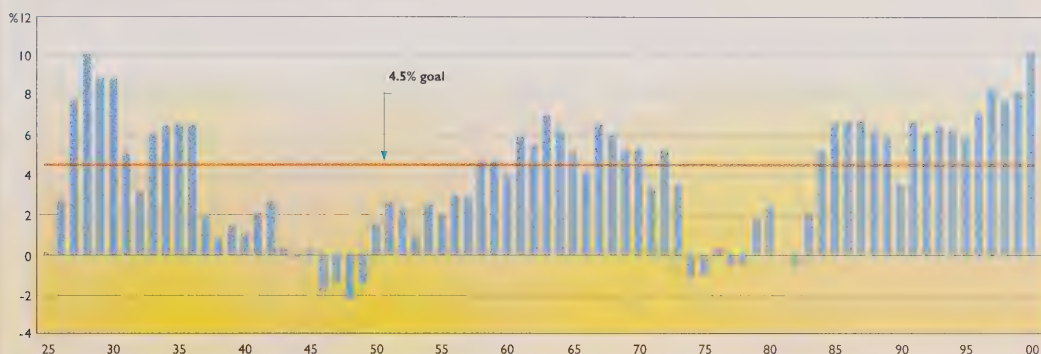
Contributions vs. Pensions  
(\$ billions)



The gap between contributions and pension payments continues to widen. In 2000, 153,000 teachers and the government contributed \$1.3 billion and we paid out \$2.5 billion in benefits.

**Increased risk** In future, we expect modest real rates of return from stock and bond markets compared with the past 10 years. If history repeats itself, low or negative real-rate returns are possible over multiple years, as the accompanying chart illustrates. We are more concerned now about the impact of short-term market volatility on our ability to keep contributions stable than we were 10 years ago.

Real Returns of Canadian Stocks and Bonds Portfolio



This chart tracks the rolling 10-year average real rate performance of an index-based portfolio consisting of two-thirds Canadian stocks and one-third Canadian bonds. The portfolio would reach our long-term investment target of 4.5% less than half the time.

### WORKING WITH THE PARTNERS

Based on current valuation assumptions and the benefit improvements on April 1, the plan could require at least a 1.5 percent increase (matched by the government) in the contribution rates from the current average of 8 percent of salary. In the absence of such an increase in contribution rates, the plan must rely on investment returns above the actuarial assumption to make up the difference.

Our job as investment managers is to ensure that teachers receive the pensions they are promised. In the interest of prudent management, we will support the partners in developing a policy on surplus because we believe a large increase in the contribution rate would be unacceptable to plan members. Having a surplus policy in place would also help us plan our investment strategy, allowing us to build the most appropriate asset mix and investment programs around the policy.

In the meantime, we assure plan members that the pension board is committed to maximizing investment returns so that asset values have a better chance of keeping pace with the rising value of promised pensions.

### STRIVING FOR EFFICIENCY

In seeking above-average investments, as well as providing timely and personalized member services, we strive to be an efficient organization. Last year, it cost \$133 million to operate the pension board. Ongoing administrative costs were \$106 per member. Investment expenses at 14 cents per \$100 of net assets were low compared with many other institutional investors. These costs are tabulated in note 12 to the financial statements.

### ACKNOWLEDGEMENTS

Our bi-annual employee survey showed that the pension board continues to be an attractive place to work. The positive attitudes and professionalism of staff are behind our standing as one of the consistent top investment performers in the pension fund industry as well as our highest-ever customer satisfaction rating from teachers and retirees. We remain committed to doing an even better job in the future.

**CLAUDE LAMOUREUX**

PRESIDENT AND CHIEF EXECUTIVE OFFICER



*The  
challenge of  
faster, better  
and friendlier  
service*

We are a customer-focused organization with a broad mandate that covers dozens of benefit entitlements and we serve more than 300,000 clients. Our services extend far beyond calculating and paying pensions; we respond to the ever-changing needs of our plan members and pensioners.

#### Member Services Volumes

	2000	1999
Telephone calls	94,296	78,654
Purchase of credit	12,541	18,021
Pension inception	7,034	6,397
Pension estimates	5,880	6,331
Changes to survivor benefits	3,358	3,455
Termination estimates	2,512	2,736
Death benefits	2,656	2,713
Plan transfers	2,019	2,208
Marriage breakdown calculations	806	836
Commuted value payouts	761	612

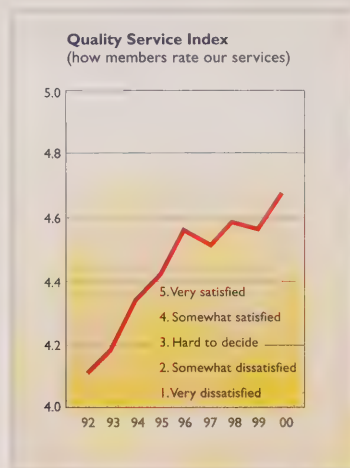
Last year, we advised more than 2,800 teachers on their options at retirement planning workshops throughout Ontario, sent out 153,000 personalized annual benefit statements to active members, and collected \$615 million in pension contributions from teachers through their employers. We paid out benefits of \$2.5 billion to approximately 77,000 pensioners and members who left the plan.

#### HIGHEST-EVER CUSTOMER SATISFACTION

Our commitment to providing outstanding immediate and personalized service to all plan members and

pensioners earned us the highest-ever customer satisfaction rating in 2000. The strongest improvements were in satisfaction with our services in providing pension inceptions, estimates, transfers, terminations and purchases of credit.

In 2001, we will replace the satisfaction survey, based on written member responses collated by staff, with an extensive random telephone survey conducted by an independent market research firm. The new approach



will measure a broader range of customer interactions, with the emphasis on services and service levels.

This should provide a more informative evaluation of our personalized relationship with members.

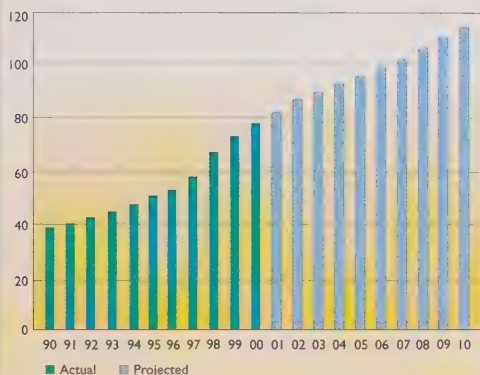
#### EXPANDING PENSIONER POPULATION

In the past three years, 21,800 teachers retired with two out of three taking advantage of the 85 factor. This increased the pensioner population to 77,000 at the end of 2000.

A large proportion of teachers is in the 45 to 55 age range and will retire in the current decade. As they consider their retirement options, these teachers will require frequent interaction with the pension board by telephone, e-mail, the Internet and one-on-one meetings.



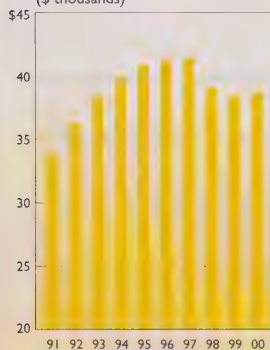
**Rapidly Growing Pensioner Population**  
(thousands)



The pension board is positioned to handle the influx of personal service needs from an expected 50,000 retirements over the current decade.

To provide better and faster customer service, we believe we have put in place some of the best technology and information management systems of any pension plan in North America. Personal service is delivered by 60 pension benefit specialists, who deal

**Average Unreduced Pension at Inception**  
(\$ thousands)



The average unreduced pension has declined from \$42,000 in 1997 to \$38,400 in 2000 due to early retirements under the 85 factor.

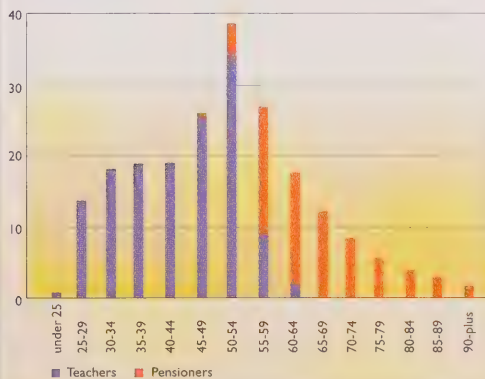
with situations ranging from members coping with the death of a spouse to requests for information on commuted value pay-outs. Staff are continuously retrained on best business practices, and we closely track our performance based on member feedback.

#### IMPROVED SERVICES

An example of how we use technology to improve service is our Computer Telephone Integration system that automatically recognizes a member's telephone number. By the time the member talks to a pension benefit specialist seconds later, the member's file is open on the specialist's computer.

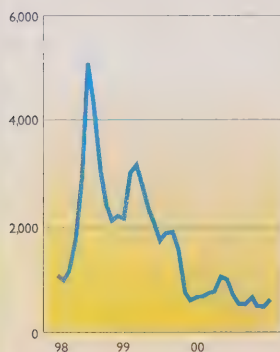
The friendliness of our specialists is one reason why our customer satisfaction level is so high. Another reason for higher satisfaction is our new easier-to-read member's annual personal statement of benefits, including greater disclosure such as commuted value (the lump sum required to replace the individual's future entitlements).

**Age Distribution of Teachers and Pensioners**  
(thousands)



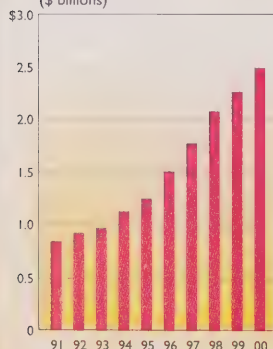
Over the past 10 years, retirees in their 50s have increased as a percentage of the pensioner population. The average pensioner age has decreased to 66.5 years.

Outstanding Cases Over 10 Days



Introduction of the 85 factor in 1998 caused a backlog in our workload. Our goal is to handle all member requests, no matter how complex, within 10 working days.

The commitment to outstanding service is evident in the time it takes to handle and complete requests from members. Outstanding requests more than 10 days old peaked at 5,000 in June 1998, following introduction of the 85 factor, and have remained well below 1,000 for most of the past year.

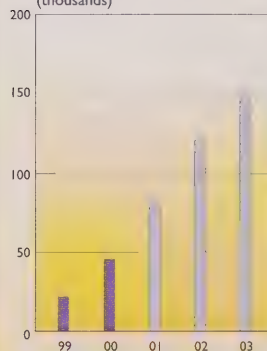
Pension Benefits  
(as at December 31)  
(\$ billions)

Benefits paid to retirees and their survivors continue to rise rapidly as a large number of teachers enter normal retirement or opt for early retirement.

We are also working with 218 employers to improve the quality and timeliness of member information we receive, including service credit and salary information on each active teacher.

By the end of 2000, 17 percent of employers, with more than 75,000 members, had been transferred from annual to payroll-based reporting. This also means that 75,000 members will now get annual statements that are one to two years more up to date than before.

With the continued cooperation of school boards, we expect to complete the transfer of all plan members to payroll-based reporting – and thus to up-to-date annual statements – by the end of 2003.

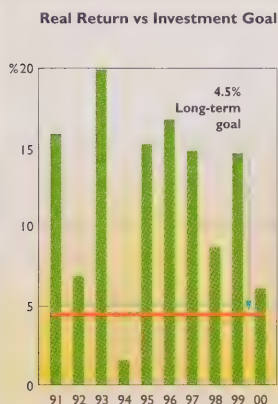
Members Receiving Up-to-Date  
Annual Statements  
(thousands)

Typically, statements are only current as of August of the previous year, a situation we expect to correct for all members by the end of 2003.

*The  
challenge  
of earning  
above-market  
returns*

Our long-term goal is to create a surplus by growing assets faster than pension liabilities. To match average liability growth, assets must generate an annual real return of 4.5 percent (that is, 4.5 percent above the rate of inflation).

Over the long term, we believe that investing mostly in stocks will earn the level of real returns the plan needs. Consequently, our asset-mix policy has always been weighted much more to equities, a strategy that has paid off since 1990 with real returns substantially above the long-term goal. However, equity returns over the current decade could be below our target of 4.5 percent.



Because of exceptional investment markets, we exceeded the long-term investment objective in the 1990s, an achievement that will be more difficult over the next decade.

Because it will be more difficult to earn the required level of returns from passive investing alone – that is, by replicating market indices for stocks, bonds and commodities – we have reduced our index funds by shifting capital to active portfolios where we can add value. Over the past 10 years, active management and tactical asset allocation improved the returns we would otherwise have received from passive index investing by 1.1 percent.

**Total Fund Value Added**  
(as at December 31)



Active management produces higher returns than the markets in which we invest can produce on their own. In 2000, this approach created \$2.6 billion in value added.

#### INVESTMENT MANAGEMENT TEAM

We employ about 95 investment professionals, from portfolio managers, bond traders and stock analysts to foreign exchange managers, merchant bankers, and derivative traders. In addition, we employ a large staff at our wholly owned real estate subsidiary, The Cadillac Fairview Corporation Limited.

About 60 finance professionals support our investment effort. They ensure compliance with rigorous operational controls, policy guidelines and risk management limits. Every day, they settle transactions, forecast liquidity requirements, and report on investment positions, portfolio risk and returns.



Approximately 35 information technology professionals maintain and enhance our trading, risk management and reporting systems. They are developing a system that instantly routes orders from portfolio managers to various trading desks and allows for electronic execution and settlement of trades.

#### MAXIMIZING INVESTMENT RETURNS

To maximize returns, we actively manage 36 percent of invested assets. Even the indexed equity and fixed-income portfolios are partially actively managed through quantitative, arbitrage and other performance-enhancing strategies. We also use derivative products to manage risk and maximize returns. As a result, we are one of the largest international traders of equity-based swaps, futures and options. Many of our active strategies are independent of market direction.

We allocate a risk capital budget to each investment portfolio with the expectation of earning a minimum 10 percent return on this risk capital. The budget allocation varies among portfolios and is proportionately smaller, for example, for fixed-income securities than for merchant banking. In aggregate, the risk capital budgets are approximately 5 percent of invested assets.

We also macro-manage the total fund through "overlay" programs. For example, the asset-mix policy allows equity exposure to vary between 50 and 70 percent of net assets relative to a target of 60 percent. In 2000, we under-weighted equities and reallocated capital to fixed-income securities and real-rate bonds.

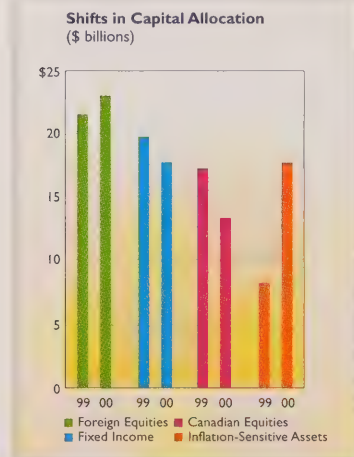
When we invest abroad, we earn a return on the investment and incur a gain or loss as a result of currency fluctuations. To reduce the volatility of returns from foreign currency fluctuations, we hedge 50 percent of investments in major foreign currencies that have a low correlation to the Canadian dollar.

Portfolio managers are rewarded for optimizing total assets and not just their own portfolios. An investment planning committee meets every two weeks to review the asset-mix policy and develop a tactical asset allocation response to current market conditions.

#### INDEX BANKING

We believe in being fully invested, and consider cash a drag on investment returns. Excess cash is normally invested in equity and fixed-income index funds until we identify opportunities that can earn above-market returns.

For example, to improve returns above the Canadian market benchmark, we have developed quantitative portfolios that invest in TSE 300 stocks based on models that attempt to identify strategies and stocks that should outperform the index. These portfolios have exceeded the TSE 300 returns for eight consecutive years. We account for about 4 percent of the value of trading volume in TSE 300 companies and have



We reduced most asset classes as we transferred capital to inflation-sensitive assets such as real estate, real-rate bonds and commodities.

minimized transaction costs by trading large blocks of individual stocks or baskets of different stocks in a single transaction. Greater use of electronic trading is further reducing costs.

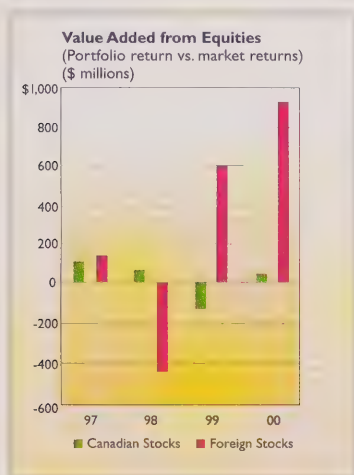
In the case of foreign equity index funds, our staff invest entirely in equity-based derivatives to earn market returns. Since the correlation of these investments to market performance is extremely high, these portfolios achieve market returns on a consistent basis.



## ACTIVELY MANAGED EQUITY PORTFOLIOS

**Stocks** We have considerable experience as an active equity investor in Canada. In 2000, we began to expand this expertise to the global marketplace by transferring capital from foreign equity index funds to internally managed global equity programs. At the end of 2000, our staff managed more than \$640 million of a total \$8.3 billion in global equities.

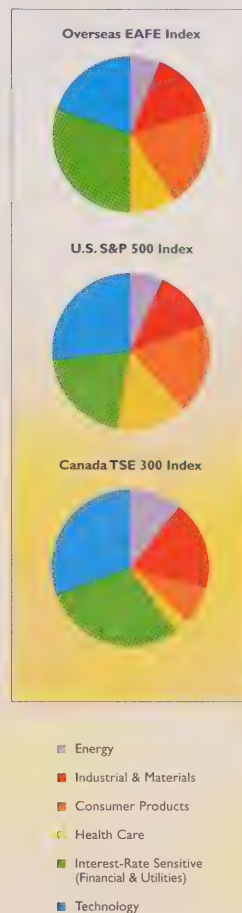
At the same time, we remain committed to external foreign equity managers who have earned exceptional returns for the plan for many years. Building our skills in active global investing will strengthen our relationships with these managers and improve our understanding of their investment decisions.



In Canada, we have added value above equity benchmarks (indicated as zero). Outside Canada, the value-added has been more volatile and more spectacular.

Opportunities to invest in public companies in Canada are limited. The Canadian market is relatively small compared to the capital held by large institutional investors. For this and other reasons, it is important to look beyond Canada for additional investment opportunities. Focusing on global opportunities should reduce fund risks and enhance returns because global markets provide a greater diversity of economic sectors. A more global focus also allows us to select companies that are world competitors with strong performance prospects.

## Exposure by Economic Sectors



Greater economic diversification outside Canada offers investment opportunities that should reduce risk and improve long-term returns.

**Corporate governance** We attempt to improve shareholder value in public companies by voting our shares, encouraging boards of directors to practice good corporate governance, and being more involved in certain companies.

We now publish our proxy voting record on our web site [www.otpp.com](http://www.otpp.com). Sharing our voting inten-

tions with management, shareholders and plan members in advance of shareholder meetings increases the transparency of our decisions and strengthens our corporate relationships with the companies in which we invest.

#### 2000 Proxy-Voting Record

	For	Against
Employee Stock Options	46	89
Shareholder Rights Plans	1	36
Other	246	135

The most contentious issue is excessive stock options that dilute shareholders' value. In our view, the cost of options should be recorded in financial statements so that shareholders know the full financial impact of these awards.

The proxy voting record shown in the table has changed little over the past three years. We intend to be more active in working with other large investors to bring about change.

Our involvement with select companies is intended to support their boards of directors in requiring management to develop a value-added strategy with growth targets. In 2000, we made direct investments in four such companies in telecommunications, energy and industrial products. The investments are 10 to 20 percent of each firm's outstanding shares and totalled \$810 million. These commitments doubled the value of our relationship investing portfolio to \$1.5 billion with direct and indirect investments in eight U.S., seven Canadian and 21 U.K. companies.

**Merchant banking** We have developed expertise in all facets of merchant banking and ended 2000 with \$3.9 billion in over 100 investments in the consumer products, communications, industrial products, entertainment & media, financial services, retail, and energy industries. We invest directly in Canadian firms, which represent 40 percent of the merchant banking portfolio. In the United States and Europe, we invest both directly and indirectly through limited partnerships.

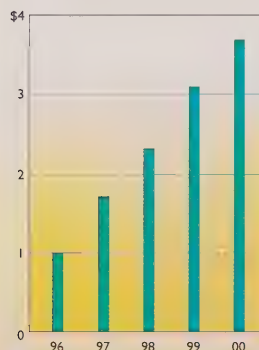
There are many opportunities to earn premium

returns in the private market, where we are specialists in identifying value-added prospects. For example, we invested \$14.8 million in a Canadian technology company in 1992 as part of a management buyout. In late 1993, the refinanced and refocused company was taken public. We divested our interest in stages and, by the time the last shares were sold in 2000, had realized \$131 million in gains. In 2000, we sold positions in eight companies acquired for \$201 million to realize net proceeds of \$310 million.

Our equity and mezzanine debt investments facilitate management buyouts, business expansions, acquisitions, financial restructurings, ownership changes and taking companies private or public. In 2000, we participated with four U.S. funds in the management buyout of Shoppers Drug Mart and acquired a significant minority interest.

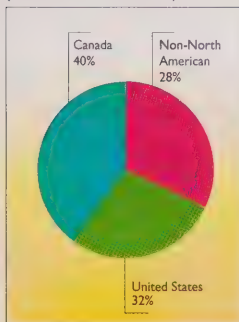
We first offered mezzanine debt in 1999 and had \$244 million invested by the end of 2000. This product appeals to many companies as an alternative to equity and senior debt, filling the void in Canada served by the high-yield market in the U.S.

**Merchant Banking Portfolio**  
(\$ billions)



Our merchant bank has grown to be one of the largest in Canada, earning annual returns in excess of 23% since 1991.

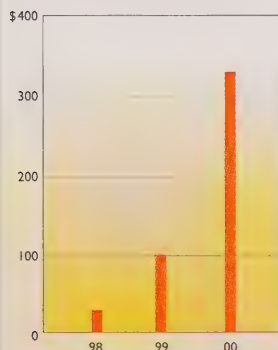
**Merchant Banking  
Geographic Distribution**  
(as at December 31, 2000)



We are increasingly adopting a global perspective in our search for premium investment returns from merchant banking.

Our merchant banking portfolio includes a venture capital fund launched three years ago that ranks among the top sources of early-stage capital in Canada. Investing in start-up enterprises carries higher risks in the expectation of higher rewards. Our size, long-term investment perspective and diverse asset base allow us to take risks in the most promising opportunities on

**Assets in Venture Capital**  
(\$ millions)



We are committed to Canadian venture capital investments where there are reasonable prospects of earning good returns for the risks involved.

the assumption that the successes will exceed the costs of failures.

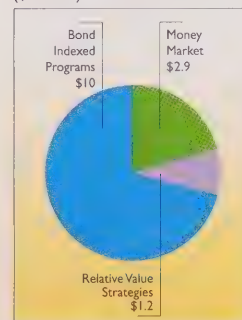
At the end of 2000, we had \$329 million invested in 24 companies and 12 venture capital funds, principally in life sciences and information technology. These investments typically involve multiple rounds of financing of \$3 million to \$20 million each. Approximately 54 percent of our venture capital investments are in Canada and 46 percent in the United States.

#### FIXED-INCOME PORTFOLIOS

During the past two years, our consolidated bond portfolios have been among the top quartile of fixed-income performers.

Our basic approach is to invest the majority of fixed-income assets in bond indexed programs to replicate the Scotia Capital Canada Universe, which contains federal government bonds. Our portfolio contains substantial holdings in Government of Canada bonds, more than three percent of the Bank of Canada's domestic public debt. However, we use relative value strategies to attempt to earn returns 20 to 30 basis points above this benchmark.

**Fixed Income**  
(as at December 31, 2000)  
(\$ billions)



The fixed-income group manages \$14.1 billion in assets.

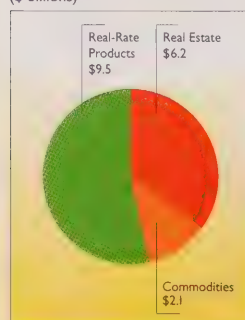


Fixed income includes \$2.9 billion allocated to the money-market portfolio and \$1.2 billion in programs where we use relative value strategies to enhance returns. We have also expanded the relative value approach to include Canadian high-yield corporate securities that are well diversified by industry and economic segment. At year-end, this portfolio totalled \$286 million. We are targeting the high-yield U.S. market for future expansion. We also continue to develop quantitative techniques to improve analytics, capture mispricing, and find other relative value opportunities in both bond and money markets. In this way we benefit from diversification by implementing strategies where expected returns have a low correlation to the fixed-income market overall.

#### INFLATION-SENSITIVE INVESTMENTS

The assets that best match the plan's liabilities have stable real returns and a high correlation with inflation. Nominal bonds are only a good fit during periods of stable inflation. Stocks have high average returns and a positive long-term correlation with inflation, but are highly volatile in the short run. Real estate, real-rate bonds and commodities are highly sensitive to inflation.

**Inflation-Sensitive Investments**  
(as at December 31, 2000)  
(\$ billions)



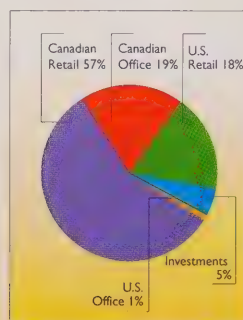
To better match inflation-indexed pensions, we are building up ownership of inflation-sensitive investments.

Since late 1998, we have managed these investments as a separate asset class. While we strive to maximize long-term real returns from these assets, their primary role is to shield the fund's surplus from the short-term risks we experienced in 2000 – a rapid rise in liabilities due to higher inflation from 2.6 to 3.2 percent and falling real interest rates from 4 to 3.4 percent.

**Real estate** We own a \$10.4 billion real estate portfolio (\$6.2 billion net of liabilities), managed by Cadillac Fairview, our wholly owned subsidiary. Approximately 95 percent of the portfolio consists of full or partial ownership of 69 shopping centres and 48 office buildings in Canada and the United States.

Our current strategy is to reposition the North American office and retail assets through a combination of redevelopment, acquisitions and dispositions with the goal of owning premier properties in key markets. This strategy is being implemented by Cadillac Fairview. We previously owned 22 percent of this company and acquired full ownership in March 2000 for \$2.4 billion. As a result, we own Canada's best property portfolio and the industry's top property management company.

**Real Estate Portfolio**  
(as at December 31, 2000)



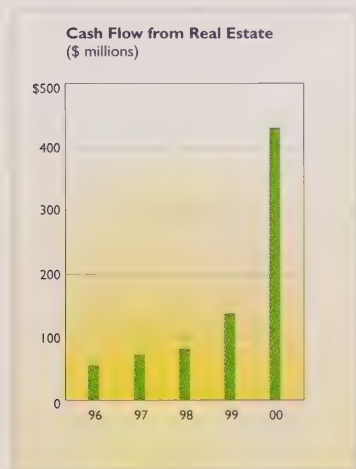
Our plan is to increase ownership of high-quality office buildings and large shopping centres in North America.



The Canadian portfolio includes premier properties, such as the Toronto Eaton Centre, Vancouver's Pacific Centre and the Toronto-Dominion Centre complex in Toronto. We recently purchased full ownership of these properties from the previous co-investor. We also strengthened our retail ownership in the Toronto area by acquiring Sherway Gardens. In the United States we own 23 shopping centres in the major markets of 10 states.

Owning Cadillac Fairview provides exclusive access to the expertise of 1,750 employees dedicated to maximizing the value of the plan's real estate assets. The Cadillac Fairview brand is internationally renowned and the company is the first call for major American and European retailers seeking a presence in the leading shopping centres. A testament to the market-draw of our shopping centres was the decision by Sears in 2000 to open five of its seven new Eatons stores in our properties.

The size and quality of our real estate portfolio provides large and predictable income. In 2000, the portfolio generated approximately \$427 million in cash flow from operations.



The cash flow from real estate in 2000 was equivalent to paying close to 13,000 annual pensions.

**Real-rate bonds** Real-rate bonds are an excellent match against plan liabilities and, along with index-linked mortgages, are risk free with respect to inflation. As a result, we continue to be a keen buyer of these securities. In 2000, we increased our holdings of Canadian real-rate products from \$4.2 billion to \$5.8 billion and entered the U.S. market by acquiring \$3.7 billion of U.S. Treasury Inflation-Protected Securities (TIPS). At year-end, our consolidated portfolio of real-rate securities totalled \$9.5 billion.

**Commodities** Commodities generally have high real returns when there is unanticipated inflation and provide a hedge against short-term inflation risks in the value of the plan's liabilities. We invest through derivatives in the Goldman Sachs Commodity Index, which is heavily weighted to oil and gas, and doubled the plan's holdings to \$2.1 billion in 2000.

This section of the annual report provides an overview of our operations and provides a more detailed explanation of the consolidated financial statements. It should be read in conjunction with the financial statements. Our objective is to present readers with a view of the pension board through the eyes of management by interpreting the material trends and uncertainties that affected the operating results, liquidity or financial condition of the pension plan in the last fiscal year. In addition to historical information, this section contains forward-looking statements that reflect management's objectives and expectations as at the date of this report, which involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements.

#### YEAR-END FINANCIAL POSITION

The plan's accrued pension liabilities increased from \$52.1 billion to \$58.6 billion during 2000. The actuarial assumptions used to determine these liabilities for financial statement purposes reflect management's best estimate of teachers' salaries, inflation, demographic factors, and market-based yields. These estimates at the end of 2000 were in line with the markets.

#### Valuation Assumptions

(as at December 31) (percent)	2000	1999
Discount rate	6.25	6.75
Salary escalation	3.20	3.25
Inflation rate	2.20	2.25

Both the financial statement and funding valuations now use the same assumptions.

**Benefit payments** In 2000, the plan paid \$2.5 billion in benefits, an increase of \$200 million over the previous year. The increase principally reflected 6,200 teachers retiring, bringing to 77,000 the number of retired members and their survivors receiving benefits.

#### Accrued Pension Benefits

(\$ Billions)	2000	1999
Accrued pension benefits, beginning of year	\$ 52.11	\$ 49.63
Interest on accrued pension benefits	3.48	3.49
Benefits earned	1.36	1.30
Benefits paid	(2.54)	(2.28)
	54.41	52.14
Changes in actuarial assumptions	3.89	0.77
Experience gains	0.26	(0.80)
Accrued pension benefits, end of year	\$ 58.56	\$ 52.11

The 2000 payments included \$164 million in commuted value transfers (versus \$108 million in 1999) and a 1.5 percent cost-of-living adjustment. To calculate the inflation adjustment rate, we average the annual change in inflation for 12 months ending in September each year. The inflation adjustment paid in January 2001 was 2.5 percent.

**Change in net assets** The plan began 2000 with \$68.3 billion in net assets available for benefits. During the year, the plan gained \$7.5 billion of income – \$6.2 billion from investments, compared with \$10.1 billion in 1999, and \$1.3 billion from contributions, compared with \$1.4 billion a year earlier.

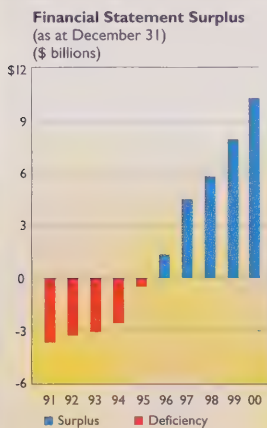
#### Changes in Net Assets

(\$ Billions)	2000	1999
<b>Income</b>		
Investment income	\$ 6.21	\$ 10.12
Contributions	1.28	1.41
	7.49	11.53
<b>Expenditures</b>		
Benefits	2.54	2.28
Operating expenses		
Member services	0.03	0.03
Investments	0.10	0.09
	2.67	2.40
<b>Increase in net assets</b>	\$ 4.82	\$ 9.13

Expenditures, including benefits paid to members and survivors, totalled \$2.5 billion and \$133 million to operate the pension board.

As a result of these changes, net assets available for benefits grew by \$4.8 billion to \$73.1 billion by the end of 2000.

**Surplus** The plan had a surplus for financial statement purposes of \$10.2 billion at December 31, 2000. This compared with \$7.9 billion a year earlier on a restated basis.



The year-end surplus, based on the financial statements, quantifies the plan's financial position from an accounting perspective.

In the past, management used its best estimate of the long-term rate of return to determine the present value of all future pension benefits and assets. Net asset gains that exceed the actuarial assumptions were amortized over five years to smooth out the impact of market volatility from one year to the next.

Beginning in 2000, and as explained in note 2 to the financial statements, a market interest rate is now used to determine fair value for both fixed-income assets and accrued pension benefits. The value of equities (including real estate and commodities) continues to be adjusted for actuarial purposes to reflect the difference between the actual equity asset returns

at year-end and management's best estimate of future equity returns. The difference in dollar terms (the actuarial asset value adjustment) is then amortized over five years. Strong performance by fixed-income assets increased our financial statement surplus.

#### MATCHING ASSETS AND LIABILITIES

To create a funding surplus we manage the relationship between investment assets and pension liabilities. Our goal is an asset mix that balances risks and rewards, avoids excessive volatility, and maintains stable contribution rates.

Because both assets and liabilities are sensitive to interest rate changes, one of our goals is to reduce the risk that liabilities will increase more than assets in response to lower real interest rates. Unfortunately,

**Real Return Bond Yields Since 1991**



Real return yields declined by 59 basis points in 2000, after remaining within a 10 basis point range for the three previous years.

that is what happened in 2000. The sharp decline in real rates of return increased the value of total liabilities by \$3 billion. During the year, we shifted assets from fixed-income and equity portfolios to real-rate products and real estate. Debt securities, along with inflation-sensitive assets, outperformed total equities to produce the healthy accounting surplus.

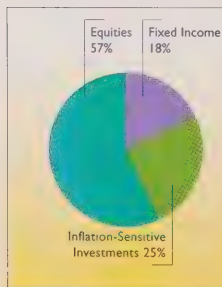


### ASSET-MIX POLICY

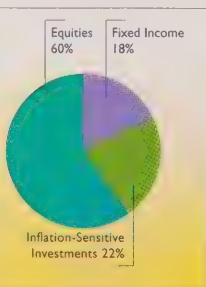
The asset-mix policy is reviewed annually by management and the board of directors and changes are made as necessary to reflect changes in our asset/liability model. The asset mix is crucial to long-term performance. Studies show that approximately 90 percent of the variability of returns over time is driven by the asset-mix decision with the remaining 10 percent influenced by active management. In recent years, we have reduced our exposure to both stocks and fixed-income securities and created an asset class of inflation-sensitive assets that correlate well with the inflation-sensitive nature of our liabilities. The change in asset-mix policy also recognized that stock markets, especially in Canada, were overvalued on both a short-term and long-term basis.

Our current asset-mix policy, set in early 2000, is 60 percent equities, 22 percent inflation-sensitive assets (specifically real estate, real-rate products, and commodities), and 18 percent fixed-income securities. This asset-mix policy has a high probability of ensuring assets grow at least as fast as the liabilities over the long term. We estimate that the change in asset-mix policy contributed \$600 million of value added during 2000 in addition to the \$2.6 billion in benchmark outperformance.

**Actual Asset Mix**  
(as at December 31, 2000)



**Asset-Mix Policy**  
(as at December 31, 2000)



In 2000, we reduced equity investments below policy and ended the year overweight in inflation-sensitive investments compared with the new policy level.

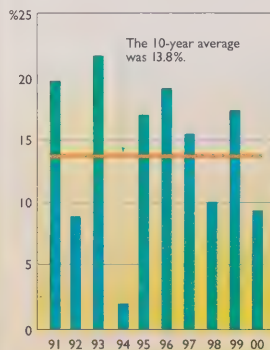
### INVESTMENT PERFORMANCE

Net investments increased to \$72 billion in 2000, compared with \$67.1 billion at the end of 1999.

**2000 total fund performance** During a year of volatile and generally negative stock markets, we achieved a 9.3 percent total fund rate of return in 2000, compared with 17.4 percent the prior year. After inflation of 3.2 percent, the real return was 6.1 percent, compared with 14.8 percent in 1999. The 2000 return generated \$6.2 billion in investment income, compared with \$10.1 billion a year earlier. Approximately one-third of equities are exposed to foreign markets, which had negative returns in 2000.

**Four-year return** We calculate average performance on a four-year cycle to produce a less volatile and more reliable measure than a single year's results. Our four-year average return was 13.0 percent, compared with 12.5 percent for the benchmark. The real rate of return (after inflation of 1.9 percent) was 11.1 percent – well in excess of the investment objective of 4.5 percent on average over the long term.

**Rates of Return**



Over the current decade, returns are expected to revert to historical performance levels, which are closer to the long-term goal.



## Rates of Return Compared to Benchmarks

(percent)	Investment returns	Benchmark return	Composite Benchmark
Fixed income and short-term securities	15.6	13.7	Scotia Capital Treasury Bills (91 days) Scotia Capital Canada Universe Scotia Capital Long Bond
Canadian equity	13.5	7.4	TSE 300
U.S. equity	(4.1)	(5.5)	S&P 500
Non-North American equity	(8.5)	(13.5)	Morgan Stanley EAFE, EMF National Index
Inflation-sensitive	19.9	18.0	Scotia Capital Real Return Bond Custom US Treasury Inflation-Protected Securities Goldman Sachs Commodities CPI plus 4%
Total Plan	9.3	5.3	Benchmark weighted by the policy asset mix

**Ten-year return** The average annual compounded rate of return for the past 10 years was 13.8 percent. The real return (after inflation of 1.9 percent) of 11.9 percent was substantially above the long-term goal.

#### PERFORMANCE VS. BENCHMARKS

The **total fund benchmark** aggregates the benchmark returns for each asset class, using our asset-mix policy weights. In 2000, the 9.3 percent total fund return compared with 5.3 percent for the benchmark. As a result, our portfolio managers created \$2.6 billion of value above the returns that the markets in which we invested would have produced on their own. This was our largest one-year gain in value added. Included in our total fund return is our global tactical asset allocation program, which generated \$519 million of value above the composite benchmark. (Performance incentives are based on the results achieved versus the benchmark, less 34 basis points for implementation and overhead costs).

**Fixed income securities** returned 15.6 percent, a dramatic turnaround from two percent a year earlier. These assets exceeded their benchmark of 13.7 percent to earn \$229 million of value added.

**Canadian equities** (actively managed, enhanced index, and merchant banking) posted a 13.5 percent return versus 7.4 percent for the Canadian equity benchmark. Our enhanced quantitative index funds portfolio beat its benchmark for the eighth consecutive year to earn value added of \$252 million. Our actively managed Canadian equity portfolios earned \$21 million above their benchmark.

Merchant banking earned a 21.8 percent return – almost three times its benchmark to generate \$427 million in value added. This \$3.9 billion portfolio has contributed considerable value to total returns over the past 10 years.

**Foreign equities** (actively managed and enhanced index) returned a negative 4.1 percent in the U.S. and negative 8.5 percent for Non-North America (including \$30 million in implementation costs) compared with negative 5.5 percent and 13.5 percent for their respective benchmarks. We increased our exposure to foreign stock markets during the year and ended 2000 with \$23.1 billion in these assets. We also shifted capital from foreign equity index funds to actively managed programs. As a result, our actively managed programs produced \$894 million above benchmark.

**Inflation-sensitive investments** of real-rate products, commodities and real estate earned 19.9 percent versus 18 percent for the composite benchmark. Real-rate bonds had a return of 17.3 percent, or \$15 million better than the benchmark return. Commodities returned an exceptional 54.4 percent, though \$15 million less than the benchmark due to unavoidable implementation costs. Our real estate portfolio had one of its best years, earning 13.0 percent, versus 7.2 percent for its benchmark to add \$288 million in value.

#### RISKS AND RISK MANAGEMENT

We manage **surplus risk** using a Value at Risk (VaR) methodology. VaR has forced us to think of surplus risk as the aggregate of liability risk, asset-mix policy risk, and active management risk, taking into account correlation and diversification between the components.

The main source of **liability risk** is a drop in real interest rates, which increases the present value of future pensions accumulated up to that point. It makes new pension liabilities more difficult to finance, and puts upward pressure on contribution rates. Higher real interest rates have the opposite effect.

**Asset-mix policy risk** would be the mirror image of liability risk, and surplus risk would be zero, if investments perfectly matched the plan's long-term objective that asset growth will average a real rate of about 4.5 percent plus inflation. Real return bonds come close, but fall a bit short on yield.

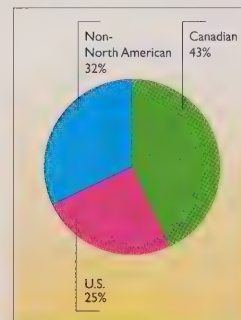
The absence of a perfectly matching asset forces us to consider assets that individually do not always behave like our pension promise, but collectively give us the best trade-off between longer term expected surplus return and acceptable short-term surplus risk. Consequently, our asset mix is heavily weighted to equities because they meet our long-term goals, while our inflation-sensitive investments give more modest real returns but dampen surplus risk.

**Active management risk** is the potential risk of under-performing the benchmark by trying to improve on the return we get from passive implemen-

tation of asset-mix policy. The incremental surplus risk from active management is small. We control active risk through policy guidelines and procedures. Again using VaR, we assign each manager "risk capital" to go along with that manager's value added target with an expectation of a specific return on that risk capital. Risk from active positions is measured daily against the risk limits. One additional benefit from these risk measures has been an improvement in operational risk management.

Changes in the value of the Canadian dollar relative to foreign currencies can increase or decrease returns on our foreign investments, creating **foreign exchange risk**. We hedge 50 percent of our exposure to the main currencies in our asset-mix policy, and had \$11.8 billion of foreign currency hedges in place at the end of 2000 to reduce volatility.

**Equities**  
(as at December 31, 2000)



Through global diversification, we aim to reduce **excessive sensitivity to Canadian asset returns** by investing in foreign stocks and equity derivative contracts.

Overall, Canada remains our primary equity market, where the plan had \$17.7 billion invested in equities in 2000, followed by \$10.1 billion in the United States, \$2.8 billion in the United Kingdom, and \$2.3 billion in Japan. However, we are concerned about the limited availability of stocks on the TSE 300. Many leading

Canadian corporations are closely owned, or listed in the U.S., further diminishing the investment pool in Canada.

With respect to **liquidity risk**, after payment of pension benefits and operating costs, the increase in net assets available for benefits totalled \$4.8 billion in 2000. Cash flow came from \$6.2 billion of investment income (dividends, interest income, rental income, and realized and unrealized gains) and \$1.3 billion in contributions.

The cash needs for pension payments and operating expenses are predictable. On the investment side, our major liquidity risk is associated with our equity derivative contracts. A drop in foreign equity markets sustained for more than three months would require us to pay more cash to counterparties than we would otherwise expect.

We regularly assess the fund's ability to withstand the liquidity effects of a catastrophic 25 percent drop in all markets. Because the equity contracts have been profitable, we currently hold \$493 million in net cash collateral from counterparties. This cash collateral, along with marketable short-term securities, annual cash flow, and other liquid assets, is more than sufficient to cover the fund's liquidity risk.

Every investment exposes us to the risk that a security issuer could default on payments or become insolvent. **Credit risk** exists with security issuers, such as governments and corporations, as well as with financial institutions and investment dealers with whom we have investment contracts. The largest credit exposure (note 3e) is to the Province of Ontario, which owes the plan \$12.2 billion of non-marketable debentures valued at \$15.7 billion, and \$1.3 billion in contributions receivable. The next largest credit exposure is to the Government of Canada at \$14.5 billion.

In the case of security issuers and derivative counterparties, we continuously monitor credit risk and, depending on the credit rating, restrict debt and equity investment in a single corporation or financial institution to between one and five percent of total fund assets.

In the case of swap counterparties, we deal primarily with 19 financial institutions rated Single A or better. Unrealized gains and losses on equity swaps are exchanged every three to six months. We exchange cash flows on interest rate swaps every six months, reducing the potential impact of a counterparty defaulting on its contractual obligations.

#### OUTLOOK

Our current expectation is that returns will not be as strong in the future as they have been in the past 10 years. We will continue to monitor financial markets and adjust our asset mix to achieve the best possible performance in the coming years. In the meantime, we assure all members that our first priority is to maximize returns without incurring undue risk.



The consolidated financial statements of the Ontario Teachers' Pension Plan have been prepared by management, which is responsible for the integrity and fairness of the data presented, including the many amounts which must, of necessity, be based on estimates and judgements. The accounting policies followed in the preparation of these consolidated financial statements conform with Canadian generally accepted accounting principles. Financial information presented throughout the annual report is consistent with the consolidated financial statements.

Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets are safeguarded and proper records maintained. These controls include quality standards in hiring and training of employees, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization. Internal controls are reviewed and evaluated by internal audit programs which are subject to scrutiny by the external auditors.

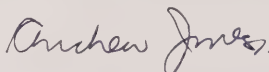
Ultimate responsibility for the consolidated financial statements rests with the Board of Directors. The board is assisted in its responsibilities by the Audit and Actuarial Committee, consisting of five directors who are not officers or employees of the plan administrator. In addition, the committee reviews the recommendations of the internal and external auditors for improvements in internal control and the action of management to implement such recommendations. In carrying out its duties and responsibilities, the committee meets regularly with management and with both the external and internal auditors to review the scope and timing of their respective audits, to review their findings and to satisfy itself that their responsibilities have been properly discharged. This committee reviews the consolidated financial statements and recommends them for approval by the board.

The plan's external auditors, Deloitte & Touche LLP, have conducted an independent examination of the consolidated financial statements in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as they consider necessary to express the opinion in their Report to the Administrator. The external auditors have full and unrestricted access to the Audit and Actuarial Committee to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal control systems.



**CLAUDE LAMOUREUX**

PRESIDENT AND CHIEF EXECUTIVE OFFICER



**ANDREW JONES**

VICE-PRESIDENT, FINANCE


FEBRUARY 14, 2001

## AUDITORS' REPORT TO THE ADMINISTRATOR

We have audited the consolidated statement of net assets available for benefits and accrued pension benefits and surplus of the Ontario Teachers' Pension Plan as at December 31, 2000 and the consolidated statements of changes in net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended. These consolidated financial statements are the responsibility of the Plan's administrator. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the net assets available for benefits and accrued pension benefits and surplus of the Plan as at December 31, 2000 and the changes in its net assets available for benefits, changes in accrued pension benefits and changes in surplus for the year then ended in accordance with Canadian generally accepted accounting principles.



CHARTERED ACCOUNTANTS

TORONTO, CANADA

FEBRUARY 14, 2001



William M. Mercer Limited was retained by the Ontario Teachers' Pension Plan Board (the "Board") to perform an actuarial valuation of the assets and the going concern liabilities of the Ontario Teachers' Pension Plan (the "Plan") as at December 31, 2000, for inclusion in the Plan's consolidated financial statements. As part of the valuation, we examined the Plan's recent experience with respect to the non-economic assumptions and presented our findings to the Board.

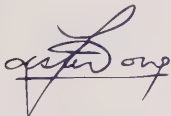
The valuation of the Plan's actuarial liabilities was based on:

- membership data provided by the Ontario Teachers' Pension Plan Board as at December 31, 1999;
- methods prescribed by the Canadian Institute of Chartered Accountants for pension plan financial statements;
- real and nominal interest rates on long term Canada bonds at the end of 2000;
- assumptions about future events (for example, future rates of inflation and future retirement rates) which have been communicated to us as the Board's best estimate of these events;
- information obtained from the Ontario Ministry of Labour and published reports on negotiated wage settlements in the 1999/2000 and 2000/01 school years; and
- an estimate of the salary grid increase for the 2000/01 school year based on the information above, along with input from the Partners.

The objective of the consolidated financial statements is to fairly present the financial position of the Plan on December 31, 2000 as a going concern. This is different from the statutory valuation [the actuarial valuation required by the *Teachers' Pension Act* and the *Pension Benefits Act [Ontario]*], which uses actuarial methods prescribed by the *Teachers' Pension Act* and cautious assumptions about future events to establish a prudent level for future contributions.

While the actuarial assumptions used to estimate liabilities for the Plan's consolidated financial statements represent the Board's best estimate of future events and market conditions at the end of 2000, and while in our opinion these assumptions are reasonable, the Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations, and will affect the financial position of the Plan, and the contributions required to fund it, at that time.

We have tested the data for reasonableness and consistency, and we believe it to be sufficient and reliable for the purposes of the valuation. We also believe that the methods employed in the valuation and the assumptions are, in aggregate, appropriate for the purposes of the valuation. Our opinions have been given, and our valuation has been performed, in accordance with accepted actuarial practice.



LESTER J. WONG, F.C.I.A.



MALCOLM P. HAMILTON, F.C.I.A.

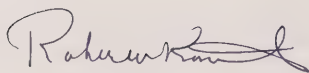
FEBRUARY 14, 2001

**CONSOLIDATED STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS  
AND ACCRUED PENSION BENEFITS AND SURPLUS**

AS AT DECEMBER 31, 2000

(\$ Millions)	2000	1999
		restated (note 2)
<b>NET ASSETS AVAILABLE FOR BENEFITS</b>		
<b>Assets</b>		
Investments (note 3)	\$85,117	\$73,872
Receivable from the Province of Ontario (note 4)	1,251	1,252
Receivable from brokers	37	210
Cash	40	42
Fixed assets	8	8
	<b>86,453</b>	<b>75,384</b>
<b>Liabilities</b>		
Investment-related liabilities (note 3a)	13,074	6,780
Due to brokers	166	230
Accounts payable and accrued liabilities	92	71
	<b>13,332</b>	<b>7,081</b>
<b>Net assets available for benefits</b>	<b>73,121</b>	<b>68,303</b>
Actuarial asset value adjustment (note 1e)	(4,341)	(8,316)
<b>Actuarial value of net assets available for benefits</b>	<b>\$68,780</b>	<b>\$59,987</b>
<b>ACCRUED PENSION BENEFITS AND SURPLUS</b>		
Accrued pension benefits (note 5)	\$58,556	\$52,105
Surplus	10,224	7,882
<b>Accrued pension benefits and surplus</b>	<b>\$68,780</b>	<b>\$59,987</b>

ON BEHALF OF THE BOARD



CHAIR



BOARD MEMBER

## CONSOLIDATED STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

FOR THE YEAR ENDED DECEMBER 31, 2000

<i>(\$ Millions)</i>	2000	1999
<b>Net assets available for benefits, beginning of year</b>	<b>\$68,303</b>	<b>\$59,171</b>
<b>Investment operations</b>		
Investment income (note 7)	6,211	10,121
Investment expenses (note 12a)	(100)	(91)
Net investment operations	6,111	10,030
<b>Member service operations</b>		
Contributions (note 10)	1,281	1,413
Benefits (note 11)	(2,541)	(2,278)
Member service expenses (note 12b)	(33)	(33)
Net member service operations	(1,293)	(898)
<b>Increase in net assets</b>	<b>4,818</b>	<b>9,132</b>
<b>Net assets available for benefits, end of year</b>	<b>\$73,121</b>	<b>\$68,303</b>

# CONSOLIDATED STATEMENT OF CHANGES IN ACCRUED PENSION BENEFITS

FOR THE YEAR ENDED DECEMBER 31, 2000

(\$ Millions)	2000	1999
		restated (note 2)
<b>Accrued pension benefits, beginning of year</b>	<b>\$52,105</b>	<b>\$49,626</b>
<b>Increase in accrued pension benefits</b>		
Interest on accrued pension benefits	3,478	3,493
Benefits accrued	1,359	1,301
Changes in actuarial assumptions (note 5a)	3,893	766
	<b>8,730</b>	<b>5,560</b>
<b>Decrease in accrued pension benefits</b>		
Benefits paid (note 11)	2,541	2,278
Experience (losses) gains (note 5b)	(262)	803
	<b>2,279</b>	<b>3,081</b>
<b>Net increase in accrued pension benefits</b>	<b>6,451</b>	<b>2,479</b>
<b>Accrued pension benefits, end of year</b>	<b>\$58,556</b>	<b>\$52,105</b>

# CONSOLIDATED STATEMENT OF CHANGES IN SURPLUS

FOR THE YEAR ENDED DECEMBER 31, 2000

(\$ Millions)	2000	1999
		restated (note 2)
<b>Surplus, beginning of year</b>	<b>\$7,882</b>	<b>\$4,381</b>
Increase in net assets available for benefits	4,818	9,132
Change in actuarial asset value adjustment (note 1e)	3,975	(3,152)
Increase in actuarial value of net assets available for benefits	8,793	5,980
<b>Net increase in accrued pension benefits</b>	<b>(6,451)</b>	<b>(2,479)</b>
<b>Surplus, end of year</b>	<b>\$10,224</b>	<b>\$7,882</b>



FOR THE YEAR ENDED DECEMBER 31, 2000

**DESCRIPTION OF PLAN**

The following description of the Ontario Teachers' Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Pension Act* (the TPA) as amended.

**(a) General** The Plan is governed by the TPA. It is a contributory defined benefit pension plan co-sponsored by the Partners who are the Province of Ontario (the Province) and Plan members, represented by the Ontario Teachers' Federation (the OTF). The terms of the Plan are set out in the *Partners' Agreement*.

The Plan is registered with the Financial Services Commission of Ontario and with the *Income Tax Act (Canada)* (registration number 0345785) as a Registered Pension Plan not subject to income taxes.

The Plan is administered and the investments are managed by the Ontario Teachers' Pension Plan Board (the Board). Under the TPA, the Board is constituted as a corporation without share capital to which the *Corporations Act (Ontario)* does not apply.

**(b) Funding** Plan benefits are funded by contributions and investment earnings. Contributions are made by active members of the Plan and matched by the Province and designated private schools and organizations. The determination of the value of the benefits and required contributions is made on the basis of periodic actuarial valuations (note 9).

**(c) Retirement pensions** A retirement pension is available based on the number of years of credited service, the average of the best five annual salaries and the age of the member at retirement. A member is eligible for a reduced retirement pension from age 55. An unreduced retirement pension is available at age 65 or at any age if the member has 35 years' credit or if the sum of a member's age and qualifying service equals 90. An early retirement window covering the period between June 1, 1998 and December 31, 2002 is currently provided, during which time a member can retire with an unreduced pension if the sum of the member's age and qualifying service equals 85 rather than 90.

**(d) Disability pensions** A disability pension is available at any age to a disabled member with a minimum of 10 years of credited service. The type of disability pension is determined by the extent of the disability.

**(e) Death benefits** Death benefits are available on the death of an active member and may be available on the death of a retired member. The benefit may take the form of a survivor pension, lump sum payment or both.

**(f) Escalation of benefits** Pension benefits are adjusted annually for inflation at 100 percent of the Consumer Price Index, subject to a limit of 8 percent in any one year with any excess carried forward.

**(g) Retirement Compensation Arrangement** The Retirement Compensation Arrangement (RCA) has been created by agreement between the Partners as a supplementary plan to provide the members of the Plan with benefits that, due to limitations imposed by the *Income Tax Act (Canada)* and its regulations, cannot be provided under the Registered Pension Plan. Because the RCA is a separate trust, the net assets available for benefits and accrued benefits of the RCA are not included in these financial statements (note 13).

## **I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

### **(a) Basis of presentation**

These financial statements present the financial position and the results of operations of the Plan and are prepared in accordance with Canadian generally accepted accounting principles.

The financial statements of wholly-owned subsidiary companies are consolidated as part of the Plan's financial statements.

Certain comparative figures have been reclassified to conform with the current year's presentation.

### **(b) Investments and investment-related assets and liabilities**

**Fair Value** Investments and investment-related assets and liabilities are stated at fair value. Fair value is an estimate of the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Where ascertainable, fair values are based on public market prices or quotations from investment dealers. Where public market prices or quotations are not ascertainable, fair values are derived using methods such as discounted cash flows, earnings multiples, appraisals, prevailing market rates for instruments with similar characteristics and other pricing models, as appropriate.

**Trade date reporting** Purchases and sales of investments and derivative contracts are recorded as of the trade date (the date upon which the substantial risks and rewards have been transferred).

**Investment income** Dividend income is recognized based on ex-dividend date and interest income and real estate operating income is recognized on the accrual basis as earned. Investment income also includes realized and unrealized gains and losses.

### **(c) Foreign currency translation**

Assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rates prevailing on the year-end date. Income and expenses are translated into Canadian dollars at the exchange rates prevailing on the dates of the transactions. The realized and unrealized gains and losses arising from these translations are included in investment income.

### **(d) Accrued pension benefits**

The value of accrued pension benefits and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries. The valuation is made as at the start of the year and then extrapolated to year-end. It uses the projected benefit method prorated on service and management's best estimate, as at valuation date, of various economic and non-economic assumptions (note 5).

### **(e) Actuarial asset value adjustment**

The actuarial value of net assets available for benefits is determined by reference to market trends consistent with assumptions underlying the valuation of accrued pension benefits. The adjustment represents the difference between the actual and management's best estimate of return on the Plan's equity investments (including real estate and commodities) amortized over five years. Fixed income securities are valued at fair value on a basis consistent with the discount rate used to value the Plan's accrued pension benefits.

The year-over-year change in the actuarial asset value adjustment is reflected in the Consolidated Statement of Changes in Surplus.

### **(f) Use of estimates**

In preparing these financial statements, management must make certain estimates and assumptions that primarily affect the reported values of assets and liabilities, related income and expenses and related disclosures.

## 2. CHANGES IN ACCOUNTING POLICY- ACCRUED PENSION BENEFITS

Consistent with a new Canadian Institute of Chartered Accountants standard on Employee Future Benefits, the Board changed its method of determining the best estimate assumptions used in valuing the accrued pension benefits. The Board now uses a market interest rate to discount the accrued pension benefits, in order to arrive at the fair value of the Plan's liabilities. In prior years, the Board used a rate which reflected management's best estimate of the expected long-term asset rate of return.

With this change to the determination of the discount rate, the method for calculating the actuarial asset value adjustment has also been modified. In prior years, the adjustment represented the difference between the actual and management's best estimate of return on all Plan assets, amortized over five years. The actuarial asset value now values fixed income securities at fair value, consistent with the measurement of the Plan's liabilities at fair value. For the Plan's equity investments, an actuarial asset value adjustment is calculated as the difference between the actual and management's best estimate of return on the Plan's equity assets, amortized over five years.

The changes in accounting policy referred to above have been applied retroactively in the financial statements and have the following impact on 1999 figures previously reported:

(\$ Millions)	1999 Reported	1999 Restated
Net assets available for benefits	\$68,303	\$68,303
Actuarial asset value adjustment	(7,264)	(8,316)
<b>Actuarial value of net assets available for benefits</b>	<b>\$61,039</b>	<b>\$59,987</b>
Accrued pension benefits – opening	\$48,636	\$49,626
Changes during the year	3,469	2,479
Accrued pension benefits – closing	52,105	52,105
Surplus, beginning of year	5,747	4,381
Increase in net assets available for benefits	9,132	9,132
Change in actuarial asset value adjustment (note 1e)	(2,476)	(3,152)
Increase in actuarial value of assets available for benefits	6,656	5,980
Net increase in accrued pension benefits	(3,469)	(2,479)
Surplus, end of year	8,934	7,882
<b>Accrued benefits and surplus</b>	<b>\$61,039</b>	<b>\$59,987</b>

## 3. INVESTMENTS

The Plan invests directly or through derivatives in fixed income, equities and inflation-sensitive investments in accordance with its policy of asset diversification. The purpose of such diversification is to minimize the likelihood of an overall reduction in surplus and maximize the opportunity for gains across the investment portfolio.

**(a) Investments<sup>(1)</sup> before allocating the effect of derivative contracts and investment-related receivables and liabilities**

The schedule below summarizes the Plan's investments, including net accrued interest and dividends of \$388 million (1999 – \$454 million), before allocating the effect of derivative contracts and investment-related receivables and liabilities, as at December 31:

(\$ Millions)	2000		1999	
	Fair Value	Cost	Fair Value	Cost
<b>Fixed income</b>				
Debentures	\$15,715	\$12,205	\$16,328	\$12,991
Bonds	13,218	12,696	13,303	13,198
Money market securities	4,273	4,238	2,153	2,153
Alternative investments <sup>(2)</sup>	2,162	1,720	1,326	1,166
	<b>35,368</b>	<b>30,859</b>	<b>33,110</b>	<b>29,508</b>
<b>Equities</b>				
Publicly traded				
Canadian	13,487	9,618	17,125	11,195
United States	1,885	1,565	516	559
Non-North American	6,415	5,455	8,149	5,591
Non-Publicly traded				
Canadian	1,110	856	464	446
United States	769	671	699	510
Non-North American	1,196	1,188	984	852
	<b>24,862</b>	<b>19,353</b>	<b>27,937</b>	<b>19,153</b>
<b>Inflation-sensitive investments</b>				
Real estate (note 6)	10,393	9,711	3,508	3,220
Real rate products				
Canadian	5,822	5,054	4,656	4,349
United States	4,424	4,190	391	404
	<b>20,639</b>	<b>18,955</b>	<b>8,555</b>	<b>7,973</b>
	<b>80,869</b>	<b>69,167</b>	<b>69,602</b>	<b>56,634</b>
<b>Investment-related receivables</b>				
Securities purchased under agreements to resell	1,948	1,946	992	990
Derivative-related, net	2,300	493	3,278	409
<b>Investments</b>	<b>85,117</b>	<b>71,606</b>	<b>73,872</b>	<b>58,033</b>
<b>Investment-related liabilities</b>				
Securities sold under agreements to repurchase	(3,578)	(3,572)	(2,883)	(2,879)
Securities sold but not yet purchased	(1,592)	(1,606)	(973)	(992)
Real estate (note 6)	(4,192)	(4,002)	(693)	(710)
Derivative-related, net	(3,712)	(1,199)	(2,231)	(2,294)
<b>Net investments (note 3c)</b>	<b>\$72,043</b>	<b>\$61,227</b>	<b>\$67,092</b>	<b>\$51,158</b>

(1) For additional details, refer to the Schedule of Investments for our holdings over \$50 million on page 45.

(2) Comprised of hedge funds, managed futures accounts and fund of funds programs.



**(b) Derivative contracts**

Derivative contracts are financial contracts, the value of which is derived from the value of underlying assets, indices, interest rates or currency rates. Derivative contracts are transacted either in the over-the-counter market or on regulated exchanges. The Plan utilizes derivatives to manage its asset mix, as well as its exposure to interest rates, foreign currencies, and credit. Derivatives are also utilized for trading purposes in a manner consistent with the Plan's investment objectives.

Notional amounts of derivative contracts serve as the basis upon which the returns from, and the fair value of, the contracts are determined.

The following schedule summarizes the Plan's derivative contracts as at December 31:

(\$ Millions)	2000		1999	
	Notional	Fair Value	Notional	Fair Value
<b>Asset conversion</b>				
Interest rate swaps	\$6,353	\$(933)	\$ 6,091	\$(763)
Equity and commodity swaps	17,436	(215)	13,719	3,257
		(1,148)		2,494
<b>Interest rate management</b>				
Interest rate swaps	1,330	4	1,104	1
Futures	6,962	(1)	4,238	(1)
Exchange traded options				
Purchased	2,509	5	3,041	4
Written	2,644	(4)	3,771	(4)
Over-the-counter options				
Purchased	40	1	97	3
Written	100	(1)	169	(4)
		4		(1)
<b>Foreign currency management</b>				
Currency swaps	499	(10)	553	10
Forwards	13,347	24	13,567	343
Futures	708	1	—	—
		15		353
<b>Trading</b>				
Interest rate swaps	2,427	(7)	2,836	28
Volatility swaps	967	34	66	1
Futures	18,484	(17)	13,715	(161)
Forwards	5,899	175	3,791	53
Exchange traded options				
Purchased	454	14	313	22
Written	816	(5)	441	(32)
Over-the-counter options				
Purchased	1,964	38	2,062	43
Written	1,153	(22)	1,042	(19)
		210		(65)
		(919)		2,781
Less: Net cash collateral received under derivative contracts		(493)		(1,734)
<b>Net fair value of derivative contracts</b>		<b>\$(1,412)</b>		<b>\$1,047</b>

The net fair value of derivative contracts as at December 31 on page 33 are represented by:

(\$ Millions)	2000	1999
Derivative-related receivables	\$2,562	\$4,755
Cash collateral paid under derivative contracts	428	324
Derivative-related liabilities	(3,481)	(1,974)
Cash collateral received under derivative contracts	(921)	(2,058)
	<b>\$ (1,412)</b>	<b>\$1,047</b>

Securities with a fair value of \$320 million (1999 – \$246 million) have been deposited with various financial institutions as margin to effect derivatives transactions.

The derivative contracts on page 33 mature within one year except for the following, which have a weighted average maturity (in years) of:

	2000		1999	
	Notional (\$ millions)	Maturity (years)	Notional (\$ millions)	Maturity (years)
<b>Asset conversion</b>				
Interest rate swaps	\$6,119	8.4	\$5,487	6.6
Equity and commodity swaps	2,468	1.4	5,155	1.6
<b>Interest rate management</b>				
Interest rate swaps	1,004	8.2	993	4.4
Over-the-counter options	140	1.9	—	—
<b>Foreign currency management</b>				
Currency swaps	493	5.7	553	7.1
Forwards	182	1.5	57	2.2
<b>Trading</b>				
Interest rate swaps	2,155	5.1	2,536	5.1
Volatility swaps	221	3.2	66	3.1
Over-the-counter options	83	1.6	102	2.1
Forwards	23	1.4	—	—

**(c) Investment asset mix**

The Plan has established a long-term asset-mix policy of approximately 60 percent equities, 18 percent fixed income and 22 percent inflation-sensitive investments.

The Plan's investments, after allocating the effect of derivative contracts and investment-related receivables and liabilities, as at December 31 are summarized below:

	2000		1999	
	Effective Net Investments at Fair Value (\$ millions)	Asset Mix %	Effective Net Investments at Fair Value (\$ millions)	Asset Mix %
<b>Fixed income</b>				
Bonds	\$10,771	15%	\$14,926	22%
Money market and equivalents	2,548	3	2,378	4
	<b>13,319</b>	<b>18</b>	<b>17,304</b>	<b>26</b>
<b>Equities</b>				
Canadian	17,739	25	19,885	30
United States	10,119	14	8,191	12
Non-North American	13,022	18	13,568	20
	<b>40,880</b>	<b>57</b>	<b>41,644</b>	<b>62</b>
<b>Inflation-sensitive investments</b>				
Commodities	2,098	3	1,090	2
Real estate (note 6)	6,201	9	2,815	4
Real rate products	9,545	13	4,239	6
	<b>17,844</b>	<b>25</b>	<b>8,144</b>	<b>12</b>
<b>Total net investments</b>	<b>\$72,043</b>	<b>100%</b>	<b>\$67,092</b>	<b>100%</b>

**(d) Interest rate risk**

The value of the Plan's assets is affected by short-term changes in nominal interest rates and equity markets. Pension liabilities are exposed to long-term market interest rates as well as expectations for salary escalation.

The Plan's primary exposure is to a decline in the long-term real rate of return which may result in higher contribution rates required to meet pension obligations. As at December 31, 2000, holding the inflation and salary escalation assumptions constant, a 1 percent decrease in the assumed real long-term rates of return would result in an increase in the pension liabilities of approximately 13 percent (1999 – 16 percent).

After giving effect to the derivative contracts and investment-related receivables and liabilities discussed in note 3b, a 1 percent increase in nominal interest rates would result in a decline in the value of the fixed income securities of 6.6 percent (1999 – 7.7 percent).

**(e) Credit risk**

At December 31, 2000, the Plan's most significant concentration of credit risk is with the Government of Canada and the Province of Ontario. This concentration relates primarily to the holding of \$14.5 billion of Government of Canada-issued securities and \$15.7 billion of non-marketable Province of Ontario Debentures, a receivable from the Province of \$1.3 billion and future provincial funding requirements of the Plan.

The Plan limits derivative contract credit risk by dealing principally with counterparties that have a credit rating of A or higher, and by utilizing an internal credit limit monitoring process, as well as through the use of credit mitigation techniques such as master netting arrangements and obtaining collateral where appropriate.

**(f) Foreign currency risk**

Foreign currency exposure arises from the Plan's holdings of foreign currency-denominated investments and related derivative contracts.

The Plan uses a currency overlay program to hedge a portion of its asset-mix policy allocation to U.S. and Non-North American equities. The Plan also takes trading positions in foreign currencies with the objective of adding incremental returns. The Plan's net foreign currency exposure in Canadian dollars after giving effect to the related policy hedge, as at December 31, is as follows:

(\$ Millions)	2000			1999
	Foreign Currency Exposure	Net Foreign Currency Hedge	Net Foreign Currency Exposure	Net Foreign Currency Exposure
United States Dollar	\$12,021	\$5,389	\$6,632	\$4,854
Euro	5,920	2,528	3,392	2,245
British Pound Sterling	3,370	1,405	1,965	1,537
Swiss Franc	1,561	483	1,078	252
Japanese Yen	2,489	1,774	715	1,280
Other	2,165	187	1,978	1,532
	\$27,526	\$11,766	\$15,760	\$11,700

**(g) Securities lending**

The Plan lends securities as a means of generating incremental income or supporting other investment strategies. As at December 31, 2000, the Plan's investments included loaned securities with a fair value of \$3,402 million (1999 – \$3,280 million). The fair value of collateral in respect of these loans was \$3,590 million (1999 – \$3,444 million).

**4. RECEIVABLE FROM THE PROVINCE OF ONTARIO**

The receivable from the Province consists of required matching contributions and interest thereon.

(\$ Millions)	2000	1999
Contributions receivable	\$1,194	\$1,194
Accrued interest receivable	57	58
	\$1,251	\$1,252

The receivable from the Province consists of \$636 million to be received in 2001 and \$615 million to be received in 2002.



**5. ACCRUED PENSION BENEFITS****(a) Actuarial assumptions**

The actuarial assumptions used in determining the value of accrued pension benefits of \$58.6 billion (1999 – \$52.1 billion), reflect management's best estimate of future economic events and involve both economic and non-economic assumptions. The non-economic assumptions include considerations such as mortality, withdrawal rates and retirement rates. The primary economic assumptions include the discount rate, salary escalation rate and the inflation rate. As discussed in note 2, the discount rate is now set at the market rate, as at the valuation date, of debt obligations with characteristics similar to the Plan's liabilities. The inflation rate is the difference between the yield on federal long-term nominal bonds and federal real return bonds. The salary escalation rate incorporates the inflation rate assumption and long-term expectation of growth in real wages. A summary of the primary economic assumptions, as at December 31, is as follows:

	2000	1999
Discount rate	6.25%	6.75%
Salary escalation rate	3.20%	3.25%
Inflation rate	2.20%	2.25%

The main economic assumptions were changed as a result of changes in capital markets during 2000. These changes resulted in a net increase in the value of accrued pension benefits of \$3,297 million. In addition, a change was made to the assumed post-retirement mortality rates to better reflect the Plan's experience. This change increased the value of accrued pension benefits by a further \$596 million. In 1999, changes to the actuarial assumptions resulted in a net increase in the value of accrued pension benefits of \$766 million.

**(b) Experience gains and losses**

An experience loss of \$262 million (1999 – gain of \$803 million), arising from differences between the actuarial method and assumptions and actual results, relates primarily to current experience for members' salary and inflation rates.

**6. INVESTMENT IN REAL ESTATE****(a) Acquisition of Cadillac Fairview Corporation ("CFC")**

On March 17, 2000, pursuant to a plan of arrangement, the Plan acquired the remaining 78.2 percent of the common shares that it did not previously own of CFC, a fully integrated commercial real estate operating company, and \$100 million of CFC convertible debentures for total consideration of \$2,355 million.

The fair value of CFC's net assets acquired is summarized below:

(\$ Millions)	
Real estate properties	\$5,730
Other assets	403
	6,133
Debt on real estate properties	(2,892)
Other liabilities	(324)
Net assets of CFC	2,917
Less: Investment in CFC previously held	(562)
<b>Total consideration</b>	<b>\$2,355</b>

**(b) Investment in Real Estate**

The Plan's investment in real estate, which is comprised of real estate-related investments that are either owned or managed on behalf of the Plan by The Cadillac Fairview Corporation Limited, as at December 31, is as follows:

(\$ Millions)	2000		1999	
	Fair Value	Cost	Fair Value	Cost
<b>Assets</b>				
Real estate properties	\$9,635	\$8,901	\$2,454	\$2,411
Investments	526	577	485	498
Other assets	232	233	7	7
Investment in CFC	—	—	562	304
Total assets	10,393	9,711	3,508	3,220
<b>Liabilities</b>				
Debt on real estate properties	3,833	3,694	693	710
Other liabilities	359	308	—	—
Total liabilities	4,192	4,002	693	710
<b>Net investment in real estate</b>	<b>\$6,201</b>	<b>\$5,709</b>	<b>\$2,815</b>	<b>\$2,510</b>

**(c) Real Estate Income<sup>(1)</sup>**

The Plan's real estate income for the year ended December 31, is as follows:

(\$ Millions)	2000	1999
<b>Revenue</b>		
Rental	\$1,140	\$263
Investment	41	24
	1,181	287
<b>Expenses</b>		
Property operating	447	101
Interest	242	41
Management	42	7
Other	23	—
	754	149
<b>Operating income</b>	<b>427</b>	<b>138</b>
Realized gain (loss)	14	(16)
Unrealized gain	187	190
<b>Net income</b>	<b>\$628</b>	<b>\$312</b>

(1) Operating income, on a fair value basis, excludes a charge for depreciation and amortization.

## 7. INVESTMENT INCOME

### (a) Investment income, before allocating the effect of derivative contracts

Investment income, before allocating the effect of derivative contracts and before allocating the realized and unrealized net gains/losses, for the year ended December 31, is as follows:

(\$ Millions)	2000	1999
<b>Fixed income interest</b>		
Debentures (net of interest incurred on swap contracts of \$1,039 million; 1999 – \$753 million)	\$386	\$762
Money market securities	197	104
Bonds	720	633
	<b>1,303</b>	<b>1,499</b>
<b>Equity dividend income</b>		
Canadian equity	222	271
United States equity	13	13
Non-North American equity	234	241
	<b>469</b>	<b>525</b>
<b>Inflation-sensitive investments</b>		
Real estate operating income (note 6c)	427	138
Real rate products interest income		
Canadian	189	152
United States	92	14
	<b>708</b>	<b>304</b>
	<b>2,480</b>	<b>2,328</b>
<b>Net gain on investments<sup>(1)</sup></b>	<b>3,731</b>	<b>7,793</b>
	<b>\$6,211</b>	<b>\$10,121</b>

(1) Includes net unrealized gains (losses) of \$(4,145) million (1999 – \$1,075 million).

### (b) Investment income

Investment income by asset class, after allocating the effect of the derivative contracts and net gains, including foreign currency losses of \$71 million (1999 – \$1,106 million gain), for the year ended December 31, is as follows:

(\$ Millions)	2000	1999
Fixed income	\$1,689	\$(347)
Canadian equity	2,523	4,475
United States equity	316	1,559
Non-North American equity	(694)	3,697
Inflation-sensitive investments	2,377	737
	<b>\$6,211</b>	<b>\$10,121</b>

## 8. INVESTMENT RETURNS AND RELATED BENCHMARK RETURNS

Investment returns and related benchmark returns by investment asset class for the year ended December 31 are as follows:

	2000		1999	
	Investment Returns	Investment Benchmark Returns	Investment Returns	Investment Benchmark Returns
Fixed income	15.6%	13.7%	2.0%	2.8%
Canadian equity	13.5	7.4	30.4	32.0
United States equity	(4.1)	(5.5)	12.7	14.1
Non-North American equity	(8.5)	(13.5)	27.7	21.6
Inflation-sensitive investments	19.9	18.0	12.0	9.8
Total Plan	9.3%	5.3%	17.4%	17.6%

Investment returns have been calculated in accordance with the acceptable methods set forth by the Association for Investment Management and Research and the Pension Investment Association of Canada.

The Plan identifies benchmarks to evaluate the performance of the investment management process. The performance of each asset class is measured against a benchmark that simulates the results of the markets in which the managers invest, except that the inflation-sensitive investments composite benchmark includes real estate which is measured against an inflation-related benchmark.

The total return of the Plan is measured against a Canadian dollar denominated composite benchmark produced by aggregating Canadian dollar equivalent returns from each of the policy asset class benchmarks, using the Plan's asset mix policy weights. The total return incorporates the Plan's tactical asset allocation decisions.

## 9. FUNDING POLICY

Statutory actuarial valuations are prepared periodically in accordance with the *Teachers' Pension Act* to determine the funding requirements of the Plan. Active members are currently required to contribute 7.3 percent of the portion of their salaries covered by the Canada Pension Plan and 8.9 percent of salaries above this level. Aggregate member contributions are matched by the Province and other employers.

The actuarial assumptions and methods used to determine statutory pension liabilities are different than those used to calculate the amounts disclosed in these financial statements. The statutory valuations use a more conservative approach than the valuations used in these financial statements (note 5) and also take into account benefits to be earned and contributions to be made after the valuation date.

The initial statutory valuation of the Plan, prepared by William M. Mercer Limited as at January 1, 1990 disclosed an unfunded liability of \$7.8 billion which was the amount by which the Plan's liabilities exceeded its assets. This liability was the responsibility of the Province and was to be paid off with interest by a series of special payments over a 40 year period, which began January 1, 1990. Subsequent statutory valuations have treated the present value of the remaining special payments as an asset.

The statutory valuation as at January 1, 1998 disclosed the present value of special payments to be \$8.45 billion, with an actuarial gain of \$6.78 billion. Pursuant to the *Partners' Agreement* between the Ontario Teachers' Federation (OTF) and the Province, the Partners entered into negotiations to decide how to utilize the gain. Pursuant to the agreement reached on April 18, 1998, the Partners agreed to share the 1998 actuarial gain of \$6.78 billion and future gains in the following sequence:



- (i) \$2.24 billion would be spent on improving benefits;
- (ii) special payments on the pre-1990 unfunded liability would be eliminated at an estimated cost of \$8.45 billion; and
- (iii) a further \$8.45 billion less the \$2.24 billion would be spent on improved benefits or member contribution rate reductions, subject to the Province's consent prior to April 1, 2001; or held in a contingency reserve as determined by the OTE.

As a result, \$2.24 billion of the gain was used to improve benefits under the Plan, and the remaining \$4.54 billion of the gain was used to eliminate the obligation of the Province to make special payments after November 30, 2008. These changes consumed the actuarial gain. The present value of the remaining special payments after application of gains was \$3.91 billion as at January 1, 1998.

The statutory valuation as at January 1, 1999 disclosed the present value of the remaining special payments to be \$3.65 billion with an actuarial gain of \$3.52 billion. Pursuant to the 1998 agreement noted above, all of this gain was used to eliminate the obligation of the Province to make special payments after April 1999.

The statutory valuation as at January 1, 2001 disclosed an actuarial gain of \$6.78 billion (2000 - \$4.54 billion).

#### 10. CONTRIBUTIONS

(\$ Millions)	2000	1999
<b>Members</b>		
Current service	\$604	\$612
Optional credit	11	8
	615	620
<b>Province of Ontario</b>		
Current service	601	592
Interest	42	43
Optional credit	5	11
Special payments (note 9)	—	128
	648	774
Other employers	9	9
Transfer from other pension plans	9	10
	18	19
	<b>\$1,281</b>	<b>\$1,413</b>

**11. BENEFITS**

<i>(\$ Millions)</i>	2000	1999
Retirement pensions	\$2,215	\$2,016
Disability pensions	31	30
Death benefits	102	93
Refunds	18	16
Commuted value transfers	164	108
Transfers to other plans	11	15
	<b>\$2,541</b>	<b>\$2,278</b>

**12. ADMINISTRATIVE EXPENSES****(a) Investment expenses**

<i>(\$ Millions)</i>	2000	1999
Salaries and benefits	\$40.5	\$31.8
External investment management fees	34.3	34.8
Custodial fees	6.6	6.4
Premises and equipment	6.6	6.5
Professional consulting services	5.0	4.3
Information services	3.7	3.6
Communication and travel	2.1	1.8
Statutory audit fees	0.3	0.3
Other	1.0	1.1
	<b>\$100.1</b>	<b>\$90.6</b>

**(b) Member service expenses**

<i>(\$ Millions)</i>	2000	1999
Salaries and benefits	\$20.9	\$21.2
Premises and equipment	6.2	6.1
Professional and consulting services	2.4	2.2
Communication and travel	2.1	1.9
Board and committee remuneration	0.2	0.2
Statutory audit fees	0.2	0.2
Other	0.7	0.8
	<b>\$32.7</b>	<b>\$32.6</b>

**(c) Executive compensation**

The compensation table represents full disclosure of base salary, annual bonus, long-term incentives and other compensation earned in 1998, 1999 and 2000 by the Chief Executive Officer and the four other most highly compensated executives.

Name and Principal Position	Year	Base Salary	Annual Bonus <sup>(1)</sup>	Long-term Incentive Plan <sup>(1)</sup>	Group Term Life Insurance	Other Compensation
Claude Lamoureux <i>President &amp; CEO</i>	2000	\$389,169	\$504,500	\$790,100	\$1,119	\$9,600 <sup>(4)</sup>
	1999	357,637	196,100	131,900	1,033	9,600
	1998	349,077	177,600	0	964	9,600
Robert Bertram <i>Executive V.P. Investments</i>	2000	\$302,800	\$404,000	\$627,000	\$ 870	\$13,962 <sup>(5)</sup>
	1999	276,309	102,600	101,800	798	13,343
	1998	269,053	63,200	0	777	13,209
Neil Petroff <i>Sr. V.P. International Equity Indexes, Fixed Income &amp; Foreign Exchange</i>	2000	\$196,130	\$338,500	\$451,900	\$ 561	\$ 0
	1999	175,444	202,800	51,400	507	0
	1998	170,606	124,700	0	490	0
Morgan McCague <i>Sr. V.P. Quantitative Investments</i>	2000	\$186,384	\$323,800	\$460,000	\$ 533	\$ 0 <sup>(6)</sup>
	1999	164,863	188,000	53,200	476	3,218
	1998	155,037	162,900	0	448	3,009
Allan Reesor <i>Executive V.P., Member Services and C.I.O.</i>	2000	\$237,976	\$319,200 <sup>(2)</sup>	\$280,100	\$ 682	\$ 4,808 <sup>(3)</sup>
	1999	195,619	100,900	40,797	564	3,792
	1998	188,736	94,400	59,600	545	3,654

<sup>(1)</sup> Bonuses for investment professionals are based on a combination of total fund, asset class, and individual performance, measured in dollars of value added. Performance versus benchmark is measured over four annual performance periods.

Bonuses for other executive staff are based on achievement of annual corporate and divisional objectives.

<sup>(2)</sup> Includes deferred annual incentive for 1999.

<sup>(3)</sup> The investment long-term incentive program was restructured in 1999 following a review of competitive market practices. The new program continues to be based on four-year performance periods. Initial grants are adjusted by the four-year total fund rate of return and by a performance modifier, based on total fund dollar value-added over a composite benchmark.

<sup>(4)</sup> Automobile allowance.

<sup>(5)</sup> Includes an automobile allowance of \$8,000 per annum plus unused vacation cashout.

<sup>(6)</sup> Unused vacation cashout.

**13. RETIREMENT COMPENSATION ARRANGEMENT**

The Retirement Compensation Arrangement (RCA) is established pursuant to an agreement between the Province of Ontario and the Ontario Teachers' Federation (the Partners), to provide to the members of the Plan certain benefits that would have been provided under the Registered Pension Plan, but for amendments made to the *Income Tax Act (Canada)* and its Regulations that restrict benefits that may be provided under a registered plan for periods of service after 1991 and for certain periods before 1992 that are credited after 1991.

The RCA is administered under a trust separate from the assets of the Registered Pension Plan. The Board has been appointed by the Partners to act as the trustee of the RCA.

Because the RCA is a separate trust, the net assets available for benefits and the value of accrued benefits and deficiency, referred to below, have not been included in the accompanying financial statements of the Registered Pension Plan on pages 26 to 28.

The RCA is funded on a pay-as-you-go basis from a portion of the contributions made to the Board by teachers, the Province of Ontario and designated private schools and organizations. The portion is based on a rate determined periodically by the Board's independent actuary in a manner that is expected to be sufficient to pay the benefits over the next 12 months. Due to the funding policy adopted by the Partners, the assets will continue to be substantially less than the liabilities.

In addition, since it is difficult to predict the benefits expected to be paid over the next 12 months, it is possible that the assets may be insufficient to pay the benefits. In such a case, the payment of benefits will be temporarily suspended and the contributions raised in order to fund the payments that are due under the RCA.

A summary of the balance sheet for the RCA as at December 31 is as follows:

(\$ Thousands)	2000	1999
<b>Net assets available for benefits</b>		
Assets	<b>\$2,200</b>	\$1,799
Liabilities	<b>(408)</b>	(655)
	<b>\$1,792</b>	\$1,144
<b>Accrued benefits and deficiency</b>		
Accrued benefits	<b>\$305,900</b>	\$238,768
Deficiency	<b>(304,108)</b>	(237,624)
	<b>\$1,792</b>	\$1,144

The actuarial assumptions used in determining the value of accrued benefits are consistent with the assumptions used in the Plan except that the assumed discount rate has been adjusted to reflect the impact of the 50 percent refundable tax under the RCA.

The estimate of the value of accrued benefits is highly sensitive to salary increases, both actual and assumed. Any changes to the salary assumptions will have a significant impact on the liabilities for future benefits. In addition, significant uncertainty exists in projecting the liabilities of the RCA due to changes in the number of future participants as well as changes to the income tax regulations relating to pensions.

#### 14. COMMITMENTS

The Plan has committed to enter into investment transactions, which will be funded over the next several years in accordance with the terms and conditions agreed to. As at December 31, 2000, these commitments totalled \$2,824 million (1999 – \$1,634 million).



AS AT DECEMBER 31, 2000

**FIXED INCOME**

(\$ Millions)

Type	Year of Maturity	Coupon (%)	Fair Value	Cost
Government of Canada bonds	2001–2029	4.50–13.00	\$9,516	\$9,467
Canadian corporate bonds	2001–2049	0.00–16.00	1,988	1,997
Canadian treasury bills	2001–2002	5.41–5.97	1,839	1,819
Commercial paper	2001	5.71–5.93	549	548
International corporate bonds	2003–2012	5.74–10.00	317	305
Provincial bonds	2002–2016	5.50–9.75	267	270
Foreign denominated Canadian bonds	2001–2085	4.40–13.00	213	220
Term deposits	2001	5.50–5.70	133	133
Discount instruments	2001	5.47–5.80	113	111
Securities purchased under agreements to resell	2001	2.00–6.30	1,948	1,946
Securities sold under agreements to repurchase	2001	5.75–6.45	(3,578)	(3,572)

**PROVINCE OF ONTARIO DEBENTURES**

(\$ Millions)

Maturity Date	Coupon (%)	Fair Value	Cost
2001 to 2006	9.00–15.00	\$6,186	\$5,170
2007 to 2012	10.00–16.00	9,155	6,661
Total debentures net of accrued interest		15,341	11,831
Accrued interest		374	374
<b>Total</b>		<b>\$15,715</b>	<b>\$12,205</b>

## INVESTMENTS OVER \$50 MILLION

AS AT DECEMBER 31, 2000

## CORPORATE SHARES

(Millions)

Security Name	Shares	Fair Value \$
Nortel Networks Corporation	37.8	1,823.9
Nexen Inc.	21.4	791.4
Royal Bank of Canada	9.4	476.7
Toronto-Dominion Bank, The	8.4	366.4
Encal Energy Ltd.	31.1	331.6
Bank of Montreal	4.2	328.4
BCE Inc.	7.6	328.1
Bank of Nova Scotia, The	7.5	326.1
Manulife Financial Corporation	6.8	317.8
AT&T Canada Inc.	6.9	299.7
Maple Leaf Foods Inc.	37.9	299.2
Enron Corp.	2.2	279.1
Canadian Imperial Bank of Commerce	5.7	263.3
Sun Life Financial Services of Canada Inc.	6.2	248.7
Alcan Aluminium Limited	4.7	242.4
Canadian Pacific Limited	5.5	234.5
Petro-Canada	5.1	194.1
WestJet Airlines Ltd.	8.3	192.8
Alberta Energy Company Ltd.	2.6	184.9
Celestica Inc.	2.2	177.3
Talisman Energy Inc.	2.8	155.6
Bombardier Inc.	6.3	146.7
Barrick Gold Corporation	5.9	145.3
Thomson Corporation, The	2.5	144.8
Suncor Energy Inc.	3.6	136.1
Gulf Canada Resources Limited	17.8	135.9
Canadian National Railway Company	3.1	135.5
TELUS Corporation	2.9	117.9
TransCanada PipeLines Limited	6.6	112.9
HSBC Holdings	5.0	110.2
Total Fina SA	0.6	109.3
Ballard Power Systems Inc.	1.1	103.3
Canadian Natural Resources Limited	2.4	101.6
Enbridge Inc.	2.3	101.2
Shaw Communications Inc.	2.9	99.0
Potash Corporation of Saskatchewan Inc.	0.8	97.1
Abitibi-Consolidated Inc.	7.0	95.9
ENI SpA	9.7	93.2
United Dominion Industries Limited	5.1	91.0
Imperial Oil Limited	2.3	89.6
Power Corporation of Canada	2.4	89.1
Akzo Nobel NV	1.1	86.7
Inco Limited	3.2	86.4
ING Groep NV	0.7	86.4
Research In Motion Limited	0.7	85.5
BAE Systems PLC	9.9	84.8
NewPower Holdings, Inc. (Warrants)	5.7	83.2

## CORPORATE SHARES

(Millions)

Security Name	Shares	Fair Value \$
XTRA Corporation	1.1	81.7
Veba AG	0.9	80.8
Placer Dome Inc.	5.5	79.2
Clarica Life Insurance Company	1.9	78.4
C-MAC Industries Inc.	1.2	77.4
Anderson Exploration Ltd.	2.3	77.4
BioChem Pharma Inc.	1.6	76.7
Hitachi Ltd.	5.6	75.2
Kirby Corporation	2.3	73.6
Bayer AG	0.9	73.5
Telefonos de Mexico SA	1.1	73.3
Westcoast Energy Inc.	2.0	73.2
Magna International Inc.	1.2	72.6
Loblaw Companies Limited	1.4	70.4
Seagram Company Ltd., The	0.9	70.3
Zurich Financial Services Group, The	0.1	69.8
National Bank of Canada	2.6	69.5
Power Financial Corporation	2.0	69.1
Telecom Italia SpA	5.8	68.4
Matsushita Electric Works, Ltd.	1.9	67.6
Telefonica, SA	1.5	65.5
NOVA Chemicals Corporation	2.3	65.0
Shell Transport & Trading Company	5.1	63.3
Novartis AG	0.02	61.9
Portugal Telecom SA	4.5	61.5
Unilever PLC	4.8	61.4
Aventis SA	0.5	59.4
TransAlta Corporation	2.7	59.3
Lindsay Manufacturing Co.	1.7	58.9
Nokia OYJ	0.9	58.1
Mackenzie Financial Corporation	2.1	57.3
George Weston Limited	0.7	56.2
Daiichi Pharmaceutical Co., Ltd.	1.2	55.7
Rogers Communications Inc.	2.2	55.2
Deutsche Bank AG	0.4	54.6
Australia & New Zealand Banking Group Limited	4.5	54.1
Trizec Hahn Corporation	2.3	53.4
Allied Irish Banks plc	3.1	53.3
Jardine Strategic Holdings PLC	12.2	53.2
Wolters Kluwer	1.3	52.4
Cheung Kong (Holding) Ltd.	2.7	52.3
Quebecor World Inc.	1.4	51.3
Shell Canada Limited	1.3	50.4
Royal Bank of Scotland Group	1.4	50.1
Alcatel	0.6	50.1

Note: For a complete list of companies, please see our website at [www.otpp.com](http://www.otpp.com).

## CONVERTIBLE AND EXCHANGEABLE DEBENTURES

(Millions)

Security Name	Par Value (\$)	Fair Value (\$)
Power Financial Corporation 8.0% Due April 30, 2014	85.5	529.8
PDFB Investments Inc. 3.25% Due March 12, 2018	89.1	254.6

## INVESTMENTS OVER \$50 MILLION

AS AT DECEMBER 31, 2000

## REAL ESTATE PORTFOLIO

Property	Total Square Footage	Effective % Ownership
<i>(in thousands)</i>		
<b>Canadian Regional Shopping Centres</b>		
Cataraqui Town Centre, Kingston	580	50%
Champlain Place, Dieppe	729	100%
Chinook Centre, Calgary	1,056	100%
Don Mills Shopping Centre, Toronto	420	100%
Eastgate Square, Hamilton	578	100%
Erin Mills Town Centre, Mississauga	759	50%
Fairview Mall, Toronto	883	50%
Fairview Park Mall, Kitchener	746	100%
Fairview Pointe Claire, Montreal	1,044	50%
Georgian Mall, Barrie	533	100%
Hillcrest Mall, Richmond Hill	558	100%
Intercity Shopping Centre, Thunder Bay	455	100%
Le Carrefour Laval, Montreal	1,183	100%
Les Galeries D'Anjou, Montreal	1,011	50%
Les Promenades St. Bruno, Montreal	1,036	100%
Lime Ridge Mall, Hamilton	827	100%
Market Mall, Calgary	754	50%
Markville Shopping Centre, Markham	954	100%
Masonville Place, London	684	100%
McAllister Place, St. John	471	100%
Midtown Plaza/Village, Saskatoon	687	100%
New Sudbury Centre, Sudbury	496	100%
Pacific Centre, Vancouver	1,348	50%*
Polo Park Mall, Winnipeg	1,197	100%
Regent Mall, Fredericton	446	100%
Richmond Centre, Vancouver	488	100%
Rideau Centre, Ottawa	692	31%
Sherway Gardens, Toronto	979	100%
Southland Mall, Regina	423	100%
The Promenade, Toronto	693	50%
Toronto Eaton Centre, Toronto	1,559	100%
Victoria Eaton Centre, Victoria	406	100%
Woodbine Centre, Toronto	682	60%

\* Ownership increased to 100% subsequent to year end

Property	Total Square Footage	Effective % Ownership
<i>(in thousands)</i>		
<b>Canadian Office Properties</b>		
1 Queen Street East and 20 Richmond Street East, Toronto	503	50%
Granville Square, Vancouver	398	100%
Pacific Centre Office Complex, Vancouver	1,537	50%*
Shell Centre, Calgary	681	50%
Toronto Dominion Centre Office Complex, Toronto	4,437	50%*
Toronto Eaton Centre Office Complex, Toronto	1,899	100%
Waterfront Centre, Vancouver	395	100%
Yonge Corporate Centre, Toronto	661	50%

**US Regional Shopping Centers**

Broward Mall, Fort Lauderdale, Florida	1,000	100%
Dover Mall, Dover, Delaware	834	100%
Galleria at White Plains, White Plains, New York	885	100%
Golden East Crossing, Rocky Mount, North Carolina	584	100%
Gwinnett Place, Duluth, Georgia	1,249	33%
Kitsap Mall, Silverdale, Washington	715	49%
Lakewood Center, Lakewood, California	2,044	49%
Los Cerritos Center, Cerritos, California	1,302	49%
Northpark Mall, Ridgeland, Mississippi	958	100%
Redmond Town Center, Redmond, Washington	1,119	49%
Stonewood Mall, Downey, California	929	49%
The Esplanade, Kenner, Louisiana	911	100%
Town Centre at Cobb, Kennesaw, Georgia	1,273	33%
Washington Square, Tigard, Oregon	1,239	49%

## PRIVATE COMPANIES AND PARTNERSHIPS

Absolute Return Fund Ltd.  
 Apaquogue Limited  
 ARC Canadian Energy Venture Fund  
 BC European Capital V  
 BC European Capital VI  
 BC European Capital VII  
 CACF Limited  
 DLJ Merchant Banking Partners II, L.P.  
 Exxel Capital Partners V, L.P.  
 Friedrich Grohe AG  
 Hicks, Muse, Tate & Furst Latin America Fund, L.P.  
 Magnatrx Corp.

Maple Leaf Sports & Entertainment  
 Maple Partners Financial Group  
 Morgan Stanley Real Estate Fund III International L.P.  
 Newcastle Capital Management Inc.  
 Providence Equity Partners Fund II, L.P.  
 Providence Equity Partners Fund III, L.P.  
 Schroder Asian Properties L.P.  
 Shoppers Drug Mart Inc.  
 The Macerich Company  
 The Third Hermes UK Focus Fund  
 Trimac Corporation

## ELEVEN-YEAR REVIEW

FOR THE YEAR ENDED DECEMBER 31

(\$ Millions)	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
<b>CHANGE IN NET ASSETS</b>											
<b>Income</b>											
Investment income	6,211	10,121	5,137	7,246	7,436	5,656	528	5,907	2,145	3,843	1,031
Contributions											
Members/transfers	624	630	612	591	620	636	732	689	711	651	559
Province of Ontario	657	655	653	649	673	669	704	712	740	663	587
– special payments	—	128	492	456	152	—	—	—	438	270	187
<b>Total Income</b>	<b>7,492</b>	<b>11,534</b>	<b>6,894</b>	<b>8,942</b>	<b>8,881</b>	<b>6,961</b>	<b>1,964</b>	<b>7,308</b>	<b>4,034</b>	<b>5,427</b>	<b>2,364</b>
<b>Expenditures</b>											
Benefits paid	2,541	2,278	2,103	1,802	1,520	1,261	1,130	1,001	921	829	760
Investment expenses	100	91	67	59	40	30	25	20	14	7	1
Member service expenses	33	33	32	31	29	27	26	24	23	18	19
Distribution of gain	—	—	—	—	—	—	—	325	—	—	—
<b>Total Expenditures</b>	<b>2,674</b>	<b>2,402</b>	<b>2,202</b>	<b>1,892</b>	<b>1,589</b>	<b>1,318</b>	<b>1,181</b>	<b>1,370</b>	<b>958</b>	<b>854</b>	<b>780</b>
<b>INCREASE IN NET ASSETS</b>	<b>4,818</b>	<b>9,132</b>	<b>4,692</b>	<b>7,050</b>	<b>7,292</b>	<b>5,643</b>	<b>783</b>	<b>5,938</b>	<b>3,076</b>	<b>4,573</b>	<b>1,584</b>
<b>NET ASSETS</b>											
Fixed income	13,319	17,304	11,476	10,276	10,622	12,509	11,409	17,569	19,007	19,199	18,129
Equities – Canadian	17,739	19,885	17,613	19,433	17,367	12,218	9,943	7,510	3,217	2,618	520
– Foreign	23,141	21,759	24,015	19,955	16,005	12,287	10,714	7,035	3,253	1,796	807
Inflation-sensitive investments											
– Commodities	2,098	1,090	401	126	—	—	—	—	—	—	—
– Real Estate	6,201	2,815	1,582	1,561	1,272	925	694	608	451	180	—
– Real Rate Products	9,545	4,239	3,019	1,597	1,066	1,064	653	548	457	16	—
<b>Net Investments</b>	<b>72,043</b>	<b>67,092</b>	<b>58,106</b>	<b>52,948</b>	<b>46,332</b>	<b>39,003</b>	<b>33,413</b>	<b>33,270</b>	<b>26,385</b>	<b>23,809</b>	<b>19,456</b>
Receivable from											
Province of Ontario	1,251	1,252	1,233	1,262	1,286	1,308	1,338	1,362	1,323	1,190	945
Other assets	13,159	7,040	5,391	8,537	3,293	1,586	622	36	72	10	—
<b>Total assets</b>	<b>86,453</b>	<b>75,384</b>	<b>64,730</b>	<b>62,747</b>	<b>50,911</b>	<b>41,897</b>	<b>35,373</b>	<b>34,668</b>	<b>27,780</b>	<b>25,009</b>	<b>20,401</b>
Liabilities	(13,332)	(7,081)	(5,559)	(8,268)	(3,482)	(1,760)	(879)	(957)	(7)	(312)	(277)
<b>Net Assets</b>	<b>73,121</b>	<b>68,303</b>	<b>59,171</b>	<b>54,479</b>	<b>47,429</b>	<b>40,137</b>	<b>34,494</b>	<b>33,711</b>	<b>27,773</b>	<b>24,697</b>	<b>20,124</b>
Smoothing reserve	(4,341)	(8,316)	(4,788)	(5,578)	(4,416)	(1,907)	(252)	(2,947)	(414)	(883)	709
<b>Actuarial value of net assets</b>	<b>68,780</b>	<b>59,987</b>	<b>54,383</b>	<b>48,901</b>	<b>43,013</b>	<b>38,230</b>	<b>34,242</b>	<b>30,764</b>	<b>27,359</b>	<b>23,814</b>	<b>20,833</b>
Accrued pension benefits	58,556	52,105	48,636	44,457	41,833	38,744	36,848	33,998	30,781	27,479	24,391
<b>Surplus (Deficiency)</b>	<b>10,224</b>	<b>7,882</b>	<b>5,747</b>	<b>4,444</b>	<b>1,180</b>	<b>(514)</b>	<b>(2,606)</b>	<b>(3,234)</b>	<b>(3,422)</b>	<b>(3,665)</b>	<b>(3,558)</b>
<b>PERFORMANCE (%)</b>											
Rate of return	9.3	17.4	9.9	15.6	19.0	16.9	1.7	21.7	8.9	19.6	5.6
Benchmark	5.3	17.6	11.9	15.6	18.1	17.2	(0.3)	20.5	8.0	15.4	(7.8)
Long-term goal	7.7	7.1	5.5	5.2	6.7	6.2	4.7	6.2	6.6	8.3	9.5



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